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Sammary of Colors of Princessing Test Reputer



U.S. DEPARTMENT OF AGRICULTURE Agriculture/ Marketing Service Cotton Division | JULY 1981



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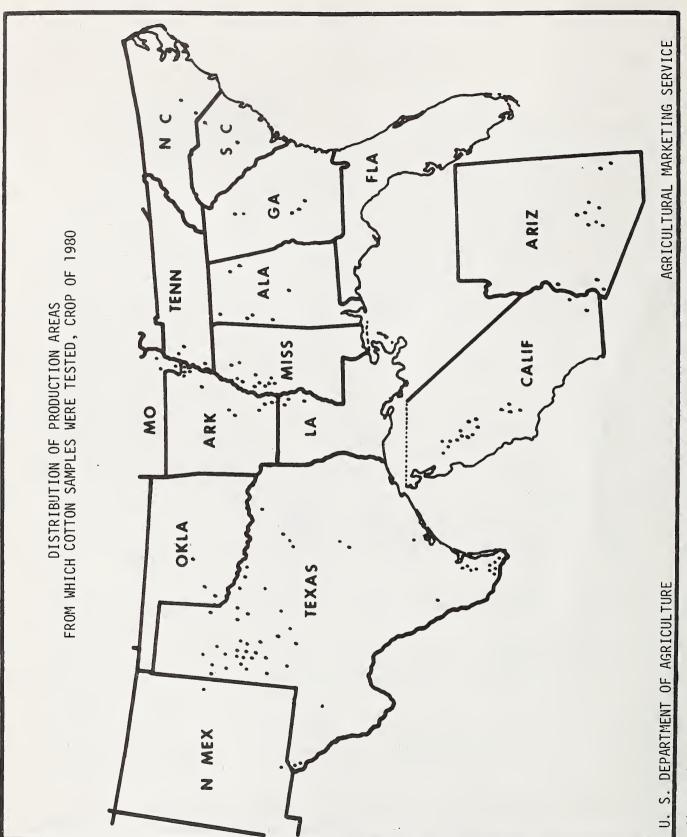


Figure 1. Location of production areas selected for the 1980 Survey.

# SUMMARY OF COTTON FIBER AND PROCESSING TEST RESULTS CROP OF 1980

#### INTRODUCTION

This report contains information on the fiber properties and spinning performance of cotton from major commercial production areas of the United States. Similar reports have been published annually since 1946.1/These reports summarize and add supplemental information to the data published in biweekly reports which were titled "Cotton Fiber and Processing Test Results, Crop of 1980" and numbered 1 through 14.

The results of fiber and spinning tests made in connection with these annual surveys provide data for studies of the relationships between fiber properties, processing performance and product quality. The data are used to measure the effectiveness of the standards to be sure that they continue to reflect differences in spinning utility. The biweekly reports enable merchants and manufacturers to use the results to locate sources of cotton to meet their specific requirements. Farmers and breeders may also use the data as a source of quality information regarding the various varieties of cottons produced under commercial growing conditions.

#### SAMPLING PROCEDURES

The procedure for selecting samples for the 1980 survey was designed to provide test lots representing all major varieties in each of the territories served by Cotton Division Marketing Services Offices (MSO). Variety selections were based on the predominant varieties planted in each MSO territory as reported by the Cotton Division in "Cotton Varieties Planted, 1976-1980." A production area was selected to represent the leading variety and one to represent each of the other varieties with an expected production of 10,000 bales or more in each MSO territory. Additional areas were selected for those varieties with a production of over 150,000 bales. One additional production area was selected for each 150,000 bales or portion thereof in excess of the first 150,000 bales. Production areas with at least 70 percent of one variety were designated as that variety with no attempt made to maintain the purity of the variety except by selection of representative production areas. However, in some cases where there was an unusual interest in a particular variety and a low percentage was planted in the area, the MSO selected lots representing 100 percent of the variety. The locations of the 134 production areas selected for the 1980 survey are shown on Figure 1.

<sup>1/</sup> Copies of past summary reports may be obtained from the Testing Section, Cotton Division, AMS, USDA, P.O. Box 67, Clemson, SC 29631, until supplies are exhausted.

Test lots were collected from each production area during the harvest season at three-week intervals. Lots were selected to represent the predominant grade and staple being classed at the time of collection. For the most part, these areas produce the specified qualities in quantities large enough to enable buyers to obtain lots of even-running grade and staple. Obviously, other qualities of cotton are available in each area as a result of normal seasonal, soil, harvesting and other variations. Most production areas also produce cotton of varieties other than those included in these tests.

Each spinning lot used in this study was made up of 20 to 30 samples of the same grade and staple length from bales classed for growers under the Smith-Doxey Act. These even-running lots of samples were then tested at the Cotton Division's Fiber and Spinning Laboratory located at Clemson, South Carolina. While this method of collecting samples does not provide data for all qualities in the crop, it does provide average test results for those qualities in largest supply during each three-week period.

#### LABORATORY PROCEDURES

Fiber, spinning and chemical finishing tests were performed under standard-ized procedures at the Cotton Division Spinning Laboratory at Clemson, SC. Most of the fiber tests were performed in the standard atmospheric conditions of 65 percent relative humidity at a temperature of 70 degrees F. Standard test procedures as outlined by the American Society for Testing and Materials were used in making tests. Tests not covered by ASTM were performed using commonly accepted procedures as recommended by the instrument manufacturer. Five subsamples were taken at random from each spinning lot to provide representative specimens for the fiber tests.

Yarn processing or spinning tests were performed by a technique developed in the Cotton Division laboratories for processing small lots of cotton on standard-type textile machines. The samples in each lot were thoroughly composited by hand-mixing before being fed to the first process picker. This hand-mixing is similar to the machine-mixing normally obtained in cotton textile opening equipment. Observations were made at each process to measure processing behavior and the yarns produced were tested to measure product quality.

On the basis of average past performance, cottons were grouped according to the expected staple length for the specified variety. All cottons of the specified variety were spun in the same manner regardless of difference in staple length. This was done so that direct comparisons of different lots of cotton within a specified variety could be made. These samples were carded at specified production rates and spun into numbers that reflect the manufacturing values of the varieties tested. In general, the rate of carding and yarn numbers from the 1980 crop are as follows:

Group 1 - Short staple cottons, carded at 12-1/2 pounds per hour and spun into carded 8s and 22s yarns with a twist multiplier of 4.40 plus a carded yarn spinning potential test for all lots. This includes varieties which normally produce staple lengths 31/32 inch and shorter.

- Group 2 Medium staple cottons, carded at 9-1/2 pounds per hour and spun into carded 22s and 50s yarns with a twist multiplier of 4.00 plus a carded yarn spinning potential test for all lots. This group includes varieties which normally produce cottons from 1 inch through 1-3/32 inches in staple length.
- Group 3 Long staple cottons, carded at 6-1/2 pounds per hour and spun into both carded and combed 22s and 50s yarns with a twist multiplier of 3.80 plus a carded yarn spinning potential test for all lots. This group includes Upland varieties which normally produce cottons from 1-1/8 inches through 1-1/4 inches in staple length.
- Group 4 Extra long staple cottons, carded at 4-1/2 pounds per hour and spun into combed 50s and 80s yarns with a twist multiplier of 3.60. This group includes all American Pima and American Upland extra long staple varieties, which are usually 1-5/16 inches or longer in staple length.

Samples of finisher drawing sliver from each spinning lot were bleached and dyed by a technique developed in the Cotton Division laboratories for small-scale finishing tests. Color tests were made on gray and chemically finished samples of finisher drawing sliver as measures of their bleaching and dyeing behavior.

#### DISCUSSION OF TEST RESULTS

## U.S. Average - Upland Cotton

All short, medium and long staple cottons were included in the American Upland average. A total of 413 spinning lots was tested from the 1980 crop compared to 411 lots from the 1979 crop. Fiber test results showed the fibers to be shorter and slightly less uniform than those tested from the 1979 season. The average micronaire reading was higher. Zero gage fiber strength was higher than in the previous year, while 1/8-inch gage fiber strength remained the same. Both Shirley Analyzer non-lint content and picker and card waste were higher. Yarn quality declined from the past season as indicated by lower skein strength, lower average appearance index and reduced spinning potential (Table 1).

# Group 1 - Short Staple Cottons

There were 104 short staple spinning lots tested from the 1980 cotton crop compared to 84 during the 1979 season. The fibers from these cottons tested shorter, slightly less uniform, and coarser. Zero gage fiber strength averaged higher while 1/8-inch gage strength was slightly lower. These samples contained a greater amount of waste as compared to the previous season, as indicated by a higher percentage of non-lint content and manufacturing waste. Both yarn strength and spinning potential were lower than in 1979. There were fewer neps in the yarn spun from these samples and the average appearance index remained unchanged.

# Group 2 - Medium Staple Cottons

American Upland medium staple spinning lots from the 1980 crop totaled 295 compared to 304 lots from the 1979 season. Fiber tests on these cottons showed them to be shorter and slightly less uniform than those tested from the previous season. The average micronaire reading was higher. Fibers were stronger as indicated by increases in both zero gage and 1/8-inch gage fiber strength. Manufacturing waste was higher. The yarns spun from these cottons were weaker than those from the 1979 crop with a lower average appearance grade. The average spinning potential yarn number was lower. There were fewer neps per thousand yards of yarn compared to yarn tested from the 1979 crop.

The <u>Southeastern</u> production area includes the states of North Carolina, South Carolina, Georgia and Alabama. Thirty-five lots from the Southeastern area were tested from the 1980 crop compared to 39 from the 1979 crop. Laboratory tests showed the fibers to be shorter with a higher average micronaire reading. Zero gage fiber strength was higher while 1/8-inch gage remained the same. Both yarn strength and spinning potential number declined from the previous year.

The <u>South Central</u> production area includes the states of Tennessee, Missouri, Arkansas, Louisiana, and Mississippi. Ninety-two spinning lots were tested from the 1980 crop, compared to 98 from the 1979 crop. Fibers from these cottons were shorter and less uniform. The average micronaire reading was higher than in the previous season. Zero gage fiber strength was higher while 1/8-inch gage was unchanged. Manufacturing waste was higher than a year earlier. Yarn quality declined as indicated by lower skein strength, average appearance index and spinning potential yarn number. However, there were fewer neps in the yarn spun from these samples.

The <u>Southwestern</u> production area consists of the states of Oklahoma and Texas except for the far western portion of Texas served by the El Paso Marketing Services Office. A total of 64 spinning lots was tested from the 1980 crop compared to 58 from the 1979 crop. Test results showed the fibers from these cottons to be shorter and slightly coarser. Pressley zero gage fiber strength was slightly higher than a year earlier, but 1/8-inch gage strength was unchanged. Both non-lint content and manufacturing waste were higher than in samples from the previous season. Yarns spun from these samples were slightly weaker. Both yarn appearance and spinning potential were lower than in 1979. The yarn had fewer neps per thousand yards than in the preceding season.

The Western production area consists of Arizona, California, New Mexico and far west Texas. One hundred and four samples from the Western area were tested from the 1980 crop compared to 109 from the 1979 crop. Fiber tests showed these cottons to be slightly shorter, finer and stronger at zero gage break than those tested from the Western area during the previous year. Both non-lint content and picker and card waste increased. With the exception of lower appearance grades, yarn quality remained about the same.

## Group 3 - Long Staple Cottons

Fourteen long staple American Upland spinning lots were tested in 1980 compared with 23 in 1979. Fiber tests showed these cottons to be shorter and coarser with the same average uniformity. The average zero gage fiber strength was higher while the 1/8-inch gage strength was slightly lower. Manufacturing waste was higher in the long staple samples from the 1980 crop. Yarn quality was down as indicated by lower average yarn strength, lower appearance grades and reduced spinning potential.

Nine long staple spinning lots from the Southeastern area were tested from the 1980 crop compared to 14 from the 1979 crop. The average fiber length was considerably shorter than a year earlier. The average micronaire reading remained the same. Fiber strength, when measured at zero gage break, was higher, while 1/8-inch gage strength averaged one gram per tex lower. Samples tested from the 1980 crop had a higher percentage of manufacturing waste. Yarns spun from these cottons were weaker with reduced spinning potential.

Three long staple spinning lots were tested from the South Central production area from the 1980 crop, the same number as tested from the 1979 crop. Fibrograph results showed the fibers from these cottons to be much shorter. They were slightly less uniform and coarser than those from the previous season. Both zero gage and 1/8-inch gage fiber strength were higher. Yarn strength declined from last season as well as spinning potential. The average nep count was lower.

Two long staple spinning lots were tested from the Western production area from the 1980 crop compared to 6 spinning lots from the previous year. Fiber test results showed these cottons to be much longer and coarser. However, fiber strength tests showed them to be slightly weaker. Shirley Analyzer non-lint content and manufacturing waste were a little higher in the 1980 crop cottons. Both yarn skein strength and appearance grades were higher. The average neps per thousand yards remained the same as in 1979. The spinning potential yarn number was higher.

# Group 4 - Extra Long Staple

The number of American Pima extra long staple spinning lots tested from the 1980 crop declined to 15 compared with 18 lots from the 1979 crop. The average fiber length increased to 1.53 inches as measured by the array method. The average micronaire and fiber strengths were about the same as in the previous season. Both non-lint content and picker and card waste were slightly higher. Yarn strength increased slightly. There were more neps in the yarns spun from the 1980 crop cottons.

#### DESCRIPTION OF TABLES

Most of the tables are in two parts located on separate pages. The first page gives fiber measurements and the next gives yarn measurements. Using Table 5 as an example, the first spinning lot is from Byers, Texas. The fiber measurements are on page 31. The yarn measurements for that same lot are on the following page.

#### TABLE 1

Shown in Table 1 (page 11) are averages for fiber and processing test results from selected gin points for the 1979 and 1980 cotton crops. These data are grouped by staple and area.

#### TABLE 2

Table 2 shows the fiber and carded yarn properties by area, staple and state for the 1979 and 1980 crops. The "coarse" and "fine" headings in this table refer to different size yarns according to the staple group.

#### TABLE 3

Beginning on page 21, Table 3 shows 1980 crop data by staple, grade and area. For statistical purposes, only grade and staple combinations with 3 or more lots are reported.

## TABLE 4

Table 4 gives fiber and yarn test results by variety from selected gin points. As indicated in the section on sampling procedures, the production areas selected must have at least 70 percent of one particular variety in order to be selected. In many cases a production area will be a 100 percent or "pure" variety gin. Test data for the pure varieties are presented in Table 4 to provide as meaningful information as possible for specific varieties.

#### TABLES 5 THROUGH 8

These tables show test results on individual spinning lots from each production area. Results on short, medium, long and extra long staple groups are given in Tables 5, 6, 7 and 8 respectively. Spinning results on short staple cottons spun on an open-end spinning frame are shown in Table 5a. Table 7a contains combed yarn quality characteristics of cotton in the long staple group.

#### TABLE 9

Table 9 is a new table presented for the first time this year. It gives the means and standard deviations for all test results by staple group. Data not reported in this summary is indicated by either a blank space or a dash (-) in place of the data. For instance, on page 90 of Table 9 there are no combed yarn data under short or medium staple groups. This summary does not report combed yarn data for these staple groups.

#### TABLES 10 THROUGH 12

These tables show the results of simple correlation analyses for fiber and processing tests. An explanation of simple correlations is contained in the section on "Description of Statistics Used in Analysis," page 109. To look up a particular correlation, find one of the variables in question in the heading and then read down the left margin until the second variable is located. The simple correlation coefficient is given at the intersection (i.e., the column and row intersection).

#### TABLES 13 THROUGH 15

A complete explanation of the multiple regression technique is given in the section, "Description of Statistics Used in Analysis," page 109.

Regression equations for estimating spinning performance and yarn quality (dependent variables) from fiber test measurements (independent variables) are shown in Tables 13-15. For each dependent variable, five equations were developed. The dependent variables are expressed in terms of:

- (1) The best one-independent variable equation
- (2) The best two-independent variable equation
- (3) The best three-independent variable equation
- (4) The best four-independent variable equation
- (5) The best five-independent variable equation

For example, Table 13, page 98, the best two-independent variable equation for total picker and card waste is expressed:

Total picker and card waste = 13.63 -.31(staple) +.85 (Shirley Analyzer non-lint)

The standard error of estimate and coefficient of determination ( $R^2$ ) for this equation is .64 and .69, respectively. This  $R^2$  indicates that 69 percent of the variation in total picker and card waste is explained by staple and Shirley Analyzer non-lint content.

The best five-independent variable equation for total picker and card waste is expressed:

Total picker and card waste = 10.32 -.02 (grade)-.28 (staple)
+.09 (uniformity)+.29 (micronaire)
+.79 (Shirley Analyzer non-lint)

The standard error of estimate and  $R^2$  for this equation are .62 and .72, respectively. These five independent variables explain 72 percent of the variation in total picker and card waste. This example shows that adding grade, uniformity and micronaire to the regression equation explained only three percent more of the variation in total picker and card waste than staple and Shirley Analyzer non-lint in the two-independent variable equation.

An independent variable may be selected for one equation and then not selected for the next equation. This is a result of the regression technique used. The technique used attempts to maximize R<sup>2</sup> by selecting the best combination of independent variables. An independent variable is selected based on its contribution in explaining the variation in the dependent variable. A variable's contribution may be influenced by the introduction of other variables into the equation. For example, page 105, with neps 22s yarn as the dependent variable, zero gage fiber strength was selected as the independent variable which gave the best R-square (.31) for a one-variable equation. However, the equation on the next line shows the two-independent variables with the best R-square to be 1/8-inch fiber strength and the +b of color of raw stock. In this case, zero gage fiber strength was dropped from the two-variable equation. However, on the next line, both zero gage and 1/8-inch gage strength along with the +b of the color of the raw stock were included in the three-variable model.

#### TABLE 16

This table gives the standard machine settings and laboratory atmospheric conditions for each phase of yarn processing used in these tests. The data are grouped by staple lengths.

TABLE 1.--COTTON: AVERAGE RESULTS OF CLASSIFICATION, FIBER, AND PROCESSING TESTS FROM SELECTED GIN POINTS, CROPS OF 1979 AND 1980.

1			 		١	ESTS	RESULTS	!			PROCESSING	12	S	
AREA AND	0F0	CLASSI	CLASSIFICATION FIBER LENGTH	FIBER	LENGTH		1BER	STRENGTHI	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					
CKOP YEAK	n	ADE	STAPLE	2.5% SPAN	50/2.5 UNIF.	: 50/2.5 NAIRE	ZER0 GAGE	8"   GE	LYZ	& CARD   WASTE	STRENGTH 22s		NEPS	SPY NO.
	02	INDEX	32ND IN.	Z   -	PCT.	RDC.	MPSI	G/TEX	PCT.	PCT.	LBS.	INDEX	NO.	NO.
SHORT STAPLE - /	AMERICA	- AMERICAN UPLAND	QN											
SOUTHWEST 1979	84	93	32.0	1.00	45	35	83	22	3.7	6.1	101	1111	41	64
1980	104	88	31.1	0.98	717	4.1	88	21	9.4	7.9	η6	111	35	ħħ
MEDIUM STAPLE -		AMERICAN UPLAND	AND											
SOUTHEAST 1979	39	89	34.9	1.09	45	ħħ	83	23	3.6	7.2	102	76	111	55
1980	35	88	34.0	1.06	717	94	91	23	3.4	7.4	86	96	47	84
SOUTH CENTRAL 1979	98	93	35.6	1.12	45	42	84	23	3.2	9.9	112	86	100	62
1980	95	89	34.8	1.09	43	74	85	23	3.3	7.3	86	96	7.1	84
SOUTHWEST 1979	58	93	33.3	1.05	45	39	94	22	3.4	7.3	101	93	101	52
1980	η9	95	32.2	1.02	717	017	98	22	3.6	7.5	66	88	7.1	747
WEST 1979	109	86	35.3	1.11	45	ħħ	91	25	2.2	6.3	1117	76	103	62
1980	104	98	35.4	1.10	††	43	93	25	2.6	6.5	118	42	106	63
U. S. AVERAGE MEDIUM STAPLE														
1979	304	η6	35.0	1.10	45	42	98	23	2.9	6.7	110	. 16	103	59
1980	295	93	34.3	1.07	717	44	91	54	3.1	7.0	105	. 88	48	53

TABLE 1. -- CONTINUED

				-		STS RE	RESULTS:	1			PROCESSING	TESTS RESULT	8	
AREA AND	OF.	CLASSI	CLASSIFICATION	FIBER	LENGTH		18ER	STRENGTHI	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u>'</u>	2 0 2 0	1 2 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	200	
CKOP YEAR		GRADE		2.5% SPAN	50/2.5 NAIRE   UNIF.	NAIRE	ZERO:	1 00 00	SHIRLEY ANALYZER NONLINT	& CARD   WASTE	757	YAKN   APPEARANCE   22s	YAKN NEPS 22s	SPY NO.
	NO.	Q N	1	Z	PCT.	RDG.	Ξ	G/TEX	PCT.	PCT.	LBS.	INDEX	. ON	NO.
LONG STAPLE - A	MER I CA	AMERICAN UPLAND	0											
SOUTHEAST 1979	14	06	35.6	1.13	ħħ	43	85	54	3.4	8.2	109	106	77	119
1980	6	87	33.7	1.05	43	43	90	23	3.5	8.8	06	106	56	911
SOUTH CENTRAL 1979	m	87	37.3	1.18	45	39	88	24	4.4	8.7	127	120	59	79
1980	m	89	36.0	1.12	44	147	92	56	3.2	8.5	105	127	6	57
WEST 1979	9	66	36.5	1.13	77 77	37	93	27	2.4	7.3	134	107	31	83
1980	2	95	37.0	1.18	941	04	90	26	2.7	9.7	138	115	3.1	66
U. S. AVERAGE LONG STAPLE	1.1													
1979	23	92	36.1	1.14	44	41	88	25	3.3	8.1	118	113	27	7.1
1980	14	89	34.6	1.09	77	43	91	24	3.3	8.6	100	111	23	56
U. S. UPLAND AVERAGE	AVERAG	LLI												
1979	411	76	34.4	1.08	45	41	98	23	3.2	9.9	109	100	86	58
1980	413	16	33.5	1.05	ተተ	43	06	23	3.5	7.3	102	96	70	51
EXTRA LONG STAPLE		- AMERICAN PIMA	AN PIMA	ARRAY	RAY									COMBER
				UQL							50s COMBED YARN	YARN DATA		(PCT.)
1979	18	m	45.8	1.45	35	39	104	34	3.1	7.5	65	127	51	15.1
1980	15	m	46.1	1.53	3.1	38	103	35	3.4	7.8	89	121	82	15.3

TABLE 2.--COTTON: AVERAGE RESULTS OF CLASSIFICATION, FIBER TESTS, AND CARDED YARN PROCESSING TESTS BY AREA, STAPLE AND STATE FOR AMERICAN UPLAND SAMPLES FROM SELECTED GIN POINTS, CROPS OF 1979 AND 1980.

		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		L	BFR	1	FIBE				COLOR	0.5		
AREA, STATE	NO.	CLASSI	CLASSIFICATION	. U	LENGTH	MICRO-	STRENGTH	ІСТН І	1/8"	SHIRLEY	RAW STOCK *	OCK *	PICKER % CARD	>d <i>y</i>
CROP YEAR	LOTS	RADE	STAPL	2.5% SPAN	: 50/2.5   : UNIF.	A-R	ZE GA	1/8"   CAGE	GATION	NONLINT	Rd	ι Ω	WASTE	
	NO.	NDEX	32ND 1N.	. Z . –	PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	UNITS	PCT.	. ON
SOUTHEAST														
MEDIUM STAPLE:														
ALABAMA 1979 1980	22	91	35.0 34.4	1.09	††† 9††	91 11	82 90	23 2 <b>3</b>	7.6	3.2	72.1	4.6	6.6	59 49
GEORGIA 1979 1980	0, 80	84 85	34.2 32.5	1.07	†† ††	45	82 94	21	6.4	4.1 3.6	70.9	10.0	8.8	46 35
NORTH CAROLINA 1979 1980	# m	87 83	35.0 34.7	1.10	†† ††	t 113	85 94	23 25	5.6	4.2	72.1	8.7	7.6	64 57
SOUTH CAROLINA 1979 1980	34	92	36.0 34.3	<u>::</u>	†† ††	†† ††	86 90	22 24	6.3	3.1	70.0	0.6	6.7	45
LONG STAPLE:												·		
GEORGIA 1979 1980	ოო	88	35.3 33.3	1.12 1.04	t 3 43	47 45	85 93	24 23	6.9	4.3	69.2	10.1	8.8	60 41
NORTH CAROLINA 1979 1980	m m	98 98	35.3 34.3	1.14	6 7 7	44 42	8 8 8 8	24 23	6.5	3.23	67.6	9.6	7.1	63 52
SOUTH CAROLINA 1979 <sup>.</sup> 1980	m m	91	36.3	1.12	8 7 7 8	39 42	85 90	23	5.6	4.2	68.9	8.9	9.5	61 46
* REPORTED AS AN INDEX IN 1979	ON I NO	EX IN 19	79.											

	1		1	1	1		1 1 1		1 1 1	1 1 1 1 1 1 1			
	Ç				YARN PROPERTIES	PERTIES				còL	FINISHER	DRAWING	
AKEA, SIAIE   AND	OF.	STRE	NGTH		1 -	APPEAR	 	 		BLE			ED -
	2	COARSE:	I N I I		1 1	OARSE:	<u>-</u>	18	FINE	Rd :	q+	Rd	i
	NO.	LBS.	LBS.	PCT.	PCT.	1	INDEX	20.0	NO.	PCT.	UNITS	PCT.	UNITS
SOUTHEAST										·	·		
MEDIUM STAPLE:													
ALABAMA 1979 1980	22	108	37	7.0	5.6	100 99	68 65	110	344 320	83.5	3.6	26.4 27.1	24.2 32.8
GEORG1A 1979 1980	6 8	87 86	29	5.6	14.6 14.6	89 92	62 66	111	403 290	83.3 89.5	5.8	27.6	23.6
NORTH CAROLINA 1979 1980	3 4	108	36	6.4 6.3	4.8 5.0	105	65	90	286 361	83.2	3.5	26.6	24.1
SOUTH CAROLINA 1979 1980	3 4	93	31 38	6.3	4.1	92 93	62 60	134 78	479 453	84.0 90.8	3.0 4.8	27.5	24.0 32.5
LONG STAPLE:													
GEORGIA 1979 1980	ကက	104	35 26	5.9	4.8 4.4	117	93	19 15	177	82.4 90.1	3.6	27.1	24.0 32.1
NORTH CAROLINA 1979 1980	ကက	108	37	6.4 5.5	5.4	120 103	90 70	17 27	97	83.6	3.5	27.1	23.7
SOUTH CAROLINA 1979 1980	ကက	105 92	36 30	6.0	4.6 4.2	103 103	63 70	33 35	281 243	84.4 90.2	3.4	27.5	23.6

TABLE 2. -- CONTINUED

	n z 	NO.			64	59 49	63	64 50	62 41		5 57	
	WAS	PCT.			6.2	6.9	6.9	5.9	6.3		8.5	
*	- q	UNITS			8.8	4.8	8.4	9.1	9.1		9.1	
	Rd	PCT.			70.9	75.3	72.0	74.4	72.1		71.9	
SHIRLEY	NALYZ ONLIN	PCT.			3.6	3.4	3.4 3.6	3.7	2.9 9.9		3.2	
1/8"	CATION	PCT.			7.1	7.1	7.2	6.9	7.2		5.9	
ER NGTH		G/TEX			23.33 23.33	23	22 23	23 23	23		- 26	
	77	MPSI			84 93	83 92	83 92	76 98	84 91		92	
		RDG.			43 47	41 47	45 46	6t1 111	39 48		- 47	
BER :NGTH	5	PCT.			45	44 43	45 43	45 43	45 43		†† -	
<u>-                                    </u>	2.5% SPAN	  			1.12	1.10	1.12	1.10	1.10		1.12	
	· W	32ND IN.			35.6 34.7	35.2 34.4	35.5 35.1	36.0 35.2	35.2 34.1		36.0	
CLASSIFICATIO	GRADE	INDEX			95 87	91 93	93	46 46	94		- 88	
NO.	LOTS	NO.			20	16	48 32	99	80		ıπ	
AREA, STATE	CROP YEAR		SOUTH CENTRAL	MEDIUM STAPLE:	ARKANSAS 1979 1980	LOUISIANA 1979 1980	MISSISSIPPI 1979 1980	MISSOURI 1979 1980	TENNESSEE 1979 1980	LONG STAPLE:	MISSOURI 1979 1980	

UNITS 25.8 24.9 24.6 24.5 24.1 32.9 32.9 **q**-COLOR OF FINISHER DRAWING SLIVER DYED PCT. 26.3 27.0 26.9 26.6 26.4 27.0 26.8 26.4 26.2 26.7 26.7 Rd UNITS 3.3 4.5 **9** 3.2 3.2 3.45 3.6 BLEACHED 83.6 83.0 9.06 PCT. 83.6 83.8 90.9 84.2 91.0 Rd | COARSE : FINE | COARSE : FINE | COARSE : FINE 365 350 234 302 262 321 384 371 94 . 0 NEPS 89 112 1 6 103 93 . NO. 87 INDEX 69 65 69 75 66 68 -87 APPEARANCE YARN PROPERTIES INDEX 106 102 94 92 97 103 127 PCT. 5.4 4.5 5.2 5.6 4.6 5.2 5.6 4.6 ELONGATION PCI. 6.9 6.7 7.1 6.8 6.0 COARSE : FINE LBS. 34 37 36 38 40 39 33 STRENGTH LBS. 111 115 116 105 107 98 111 LOTS . 0 N NO. ıκ 20 48 9 800 16 16 MEDIUM STAPLE: AREA, STATE AND CROP YEAR MISSISSIPPI 1979 1980 SOUTH CENTRAL LONG STAPLE: TENNESSEE 1979 1980 LOUISIANA 1979 1980 ARKANSAS 1979 1980 MISSOURI 1979 1980 MISSOUR! 1979 1980

TABLE 2. -- CONTINUED

AREA, STATE		CLASSIFICATION	i		: ₩≥		FIBER STRENGTH	ER I	1/8"	SHIRLEY	COLOR OF RAW STOCK*	0F *	PICKER	
	LOTS	GRADE	STAPLE	2.5% SPAN	50/2.5 UNIF.		ZERO: GAGE:	1/8"   GAGE	CATION	ANALYZEK NONLINT	Rd	q+	& CAKD WASTE	NO.
	NO.	INDEX	32ND IN.		PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	UNITS	PCT.	NO.
SOUTHWEST														
SHORT STAPLE:														
CENTRAL TEXAS 1979 1980	27	92 93	33.1	1.03	47 44 44	42 43	83 92	21 20	7.2	3.7 3.4	73.5	10.0	6.2	51 35
NORTHWEST TEXAS 1979 1980	.s 51 74	93	31.2	0.99	††† †††	32 41	84 86	22	7.6	3.8 4.9	72.4	9.6	4.98.0	7 th
ОКLАНОМА 1979 1980	60	η6 η6	32.3	1.00	45 43	34 42	82 90	23	8.2	3.1 4.6	74.5	9.6	5.6	51
MEDIUM STAPLE:														
SOUTH TEXAS 1979 1980	32 34	93 94	33.9 31.9	1.06	46 45	45 40	84 85	22	6.3	3.2	75.3	7.6	6.9	56 46
CENTRAL TEXAS 1979 1980	99	94 95	35.3 34.3	1.10	45 45	45 46	84 88	23	7.2	2.5 2.4	75.9	0.6	5.8	62 52
NORTHWEST TEXAS 1979 1980	.S 20 24	98	31.8 32.2	1.01	††† †††	30 39	85 86	23	7.2	4.0 4.6	75.0	9.1	8.8	8th 118
OZOL MI STONI NA 34 GEROGEG *	1	101 M	ç											

\* REPORTED AS AN INDEX IN 1979.

UNITS Rd : -b 24.4 32.2 24.6 32.2 25.4 23.4 23.7 24.1 32.1 COLOR OF FINISHER DRAWING SLIVER PCT. 26.6 27.5 26.6 28.3 26.2 27.8 26.5 26.5 27.2 UNITS 3.9 3.8 3.2 3.2 3.9 3.4 BLEACHED 83.8 83.1 84.2 91.7 83.9 83.6 91.2 PCT. 83.4 90.8 Rd LBS. LBS. PCT. PCT. INDEX INDEX NO. NO. 278 356 420 44 43 4133 26 36 111 1 52 76 ~ 8 ~9 62 113 110 120 67 70 YARN PROPERTIES 121 116 76 78 101 96 107 127 114 7.1 7.2 7.4 4.5 5.4 4.9 5.4 4.9 6.6 8.1 8.2 6.1 6.9 8.3 STRENGTH COARSE : FINE 102 86 32 333 97 101 95 38 308 270 307 308 111 104 100 100 NO. OF LOTS . 0 51 74 32 34 20 24 27 21 20 9 NORTHWEST TEXAS 1979 51 1980 72 NORTHWEST TEXAS 1979 CENTRAL TEXAS 1979 1980 CENTRAL TEXAS 1979 1980 MEDIUM STAPLE: SOUTH TEXAS 1979 1980 SHORT STAPLE: AREA, STATE AND CROP YEAR OKLAHOMA 1979 1980 SOUTHWEST

TABLE 2. -- CONTINUED

TABLE 2. -- CONTINUED

	NO.	N O N		50	68 <b>68</b>	57		- 66
PICKER	WASTE	PCT.		6.4	6.2	9.6		7.6
0F * 1	 - q	UNITS		8.2	η·8	. 8 		7.9
COLOR OF RAW STOCK*	Rd	PCT.		80.2	79.5	72.0		. 9.77
SHIRLEY	NONLINT	PCT.		2.2	2.2 2.2	ري 8		2.7
1/8"	GATION	PCT.		6.9	6.3	5.4		4.9
FIBER STRENGTH	1/8" GAGE	G/TEX		23	26 26	- 12		- 56
FIB	ZERO	MPSI		88 88	94	-87		06
2	NAIRE	RDG.	uf.	, 46 45	43 43	<b>ក</b> †		04
FIBER LENGTH	50/2.5 UNIF.	PCT.		7 7 7 7	45	††† -		94
F-B 	2.5% SPAN	Z	÷.	1.09	1.12	1.06		1.18
CLASSIFICATION	GRADE : STAPLE	32ND IN.		34.8 34.9	35.6 35.6	35.0		37.0
CLASSI	GRADE	INDEX		100	98 96	- 2		95
020	LOTS	NO.		37	72	lm		• ~
AREA, STATE   NO.   CLASSIFICATION	CROP YEAR	1 1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WEST MEDIUM STAPLE:	AR1ZONA 1979 1980	CAL   FORN   A 1979 1980	WEST TEXAS 1979 1980	LONG STAPLE:	WEST TEXAS 1979 1980

\* REPORTED AS AN INDEX IN 1979.

UNITS 24.7 32.8 24.1 32.4 32.0 31.4 BLEACHED | DYED Rd : -b COLOR OF FINISHER DRAWING SLIVER UNITS PCT. 26.7 27.5 26.8 27.8 28.4 29.1 3.2 3.3 4.4 4.8 PCT. 83.4 | NEPS COARSE : FINE | COARSE : FINE | COARSE : FINE | COARSE : FINE | LBS. PCT. INDEX INDEX NO. NO. 343 330 148 354 394 . 09 31 71 120 120 INDEX STRENGTH | ELONGATION | APPEARANCE - 8 65 65 63 INDEX YARN PROPERTIES - 08 115 101 96 78 5.0 5.6 5.3 4.5 6.2 6.6 6.4 5.7 52 333 ††† 9† 36 LBS. 138 101 125 124 107 NO. OF LOTS NO. 37 72 ıκ 1 (2) MEDIUM STAPLE: AREA, STATE AND CROP YEAR CALIFORNIA 1979 1980 WEST TEXAS 1979 1980 LONG STAPLE: WEST TEXAS 1979 1980 AR1ZONA 1979 1980

TABLE 2 . -- CONTINUED

TABLE 3.--COTTON: AVERAGE RESULTS OF FIBER AND CARDED YARN PROCESSING TESTS BY STAPLE GROUP, AREA, GRADE AND STAPLE FOR AMERICAN UPLAND SAMPLES FROM SELECTED GIN POINTS, CROPS OF 1979 AND 1980.

	NO.	. ON			3 4 4 5 4 8 4 8	39 44 52 52	42 50	50	50			53 53	71	53
PICKER	WASTE	PCT.			6.8 7.6 7.4 6.8	7.9 7.6 8.2	8.1	8.2	8.2			6.9	7.1	. 7.5
OF TOCK	q+	UNITS			0.5 9.8 8.8	9.7 9.3 9.4	10.0	9.4	9.8			8.9 9.4	9.5	9.8
COLOR OF RAW STOCK	Rd	PCT.			73.5 73.9 75.8 76.4	73.2 73.2 76.0 74.3	68.5	71.7	7.69			74.4 72.5	71.0	72.2
SHIRLEY	NONLINT	PCT.			33.33.33.4	5.4.83	5.0	5.9	5.4			3.3	2.9	4.2
1/8"	GATION	PCT.			65.0 6.0 6.0 6.0 6.0 6.0	66.0 5.34 5.34	6.5	6.5	4.9			6.3	6.1	5.7
IR IGTH	1/8"   GAGE	G/TEX			20 20 22 22	21 22 22 22	21	22	21			24 23	22	24
FIBER STRENGTH	ZERO:   CAGE:	MPSI			92 88 84 84	89 87 87 93	†8	84	98			89 89	06	η6
0	2 62	RDG.			4 4 4 5 2 4 4 5 4 5 4 7 7 7 7 8 7 7 7 7 7 7 7 7 7 7 7 7 7 7	452 40 410	42 38	04	41			44 42 42	917	47
FIBER	50/2.5   : UNIF.	PCT.			12 12 12 12 12 12 12 12 12 12 12 12 12 1	11 11 11 11 11	†† ††	43	42			45 43	42	45
	2.5% SPAN				0.93 0.97 0.96 1.00	0.94 0.97 1.00 1.00	0.97	1.01	1.00			1.08	1.06	1.06
0 0 1	LOTS	NO.			ななのひ	10 23 3	7	#	9			mω	7	7
		32ND			32 32 32 32	30 33 33	31	32	32			34 35	34	34
ROUP,	STAPLE	CODE	GROUP		32	42	43	52	53	GROUP		41	42	52
STAPLE GROUP,	GRAD	NAME	SHORT STAPLE GROUP	SOUTHWEST:	MID LT SP SLM	SLM LT SP	SLM SP	LM LT SP	LM SP	MEDIUM STAPLE GROUP	SOUTHEAST:	SLM	SLM LT SP	LM LT SP

LIVER		q-	UNITS			32.5	32.7	31.4 32.2 31.7 31.7	31.8	30.5	31.5		33.2	32.3	32.4
DRAWING S		Rd	PCT.			27.0	27.1	28.3 27.7 28.5 28.5	27.8	30.3	28.8		26.7	28.0	27.1
COLOR OF FINISHER DRAWING SLIVER	HED		UNITS			5.6	5.0	~~~~ ~~~~~	5.6	5.0	5.3		7 t.5	4.9	5.1
l I	BLEACHED	Rd :	PCT.			91.6	92.3 91.3	90.1 90.6 91.3 90.8	89.6 91.4	91.1	4.06		91.4	6.06	6.06
			NO.			448	72 28	29 43 32 32	35 44	23	38		458 371	297	250
		RSE	ı			8 7	20	t 0 8 2	9	6	9		83 74	55	52
		FINE				106	115	112 109 112 113	117	108	102		67 49	09	75
YARN PROPERTIES	APPEARANCE	COARSE	INDEX			116	118	120 116 123	111	108	118		93 96	66	105
YARN PR						5.9	5.4	6.3 6.7 6.2	6.6	6.9	6.7		5.1	4.7	4.8
	ELONGA	COARSE	S. PCT. PCT			6.8	6.0	7.2 7.4 7.7 7.3	7.6	7.9	7.6		6.5 6.4	5.9	6.1
	NGTH	FINE	=			82 98	84 98	91 94 100 107	92 97	101	98		35 35	30	36
	STRE	COA	LBS.			260 303	265 306	286 299 313 319	288 307	312	303		104 103	92	106
9	OF.	2	No.			3.5	<b>† †</b>	10 23 3	7	4	9		r) w	7	ħ
	ــــــــــــــــــــــــــــــــــــــ		32ND IN.	۵.		32	32	30 33 33	31	32	32	A I	34	34	34
	TAB!	47	CODE 3	GROU		32	41	42	43	52	53	GRO	41	42	52
4	AREA,		NAME CO	SHORI STAPLE GROUP	SOUTHWEST:	MID LT SP	SLM	SLM LT SP	SLM SP	LM LT SP	LM SP	MEDIUM STAPLE GROUP	SLM	SLM LT SP	LM LT SP

SPY NO. 48 48 51 42 52 49 48 54 42 55 55 55 35 41 48 PICKER & CARD WASTE 5.9 7.0 7.0 7.0 7.0 8.3 6.6 6.9 6.7 6.3 8.9 7.9 8.1 8.9 8.5 8.9 8.4 8.1 8.1 9.2 9.3 9.4 9.3 8.8 9.6 8 COLOR OF RAW STOCK œ̈ 73.7 76.3 75.2 75.5 75.1 76.0 69.5 70.7 71.9 78.0 76.2 75.9 74.4 66.2 67.1 Rd SHIRLEY ANALYZER NONLINT 32.9 2.5 22.6 2.8 3.3 3.9 4.8 4.3 4.6 5.2 5.9 6.19 5.00 5.00 5.00 5.5 5.3 5.1 6.5 6.5 6.5 5.4 5.8 ZERO: 1/8" | GAGE | G/TEX FIBER STRENGTH 233 22 24 23 22 24 23 23 22 22 22 MPSI 90 85 87 89 93 93 91 92 91 91 93 87 86 85 MICRO-NAIRE 42 47 47 47 48 46 42 38 37 : 50/2.5 | : UNIF. | 42 47 47 47 F1BER LENGTH 2.5% SPAN 1.06 1.08 1.08 1.11 1.06 1.09 1.12 1.06  $\frac{1.07}{1.11}$ 1.04 1.07 1.11 0.95 1.01 NO. OF LOTS പപ്പ കല 17 20 3 6 32ND 34 35 36 34 34 35 36 34 30 31 32 32 AREA, GRADE AND STAPLE MEDIUM STAPLE GROUP STAPLE GROUP, CODE 42 51 52 41 42 52 61 SOUTH CENTRAL: SLM LT SP SP SOUTHWEST:  $_{\mathrm{SP}}$ SP L ۲ <u>م</u> SLM SLM 860 Σ Σ

ING SLIV	DYED	q- :	<u> </u>			0 33.5	5 33.1 4 33.3 9 33.0	1 32.7 8 33.0	1 32.7 1 32.8 1 32.9	5 32.3 3 32.7	8 32.2		2 32.5 0 32.7	5 32.6 5 32.7 6 32.6	6 31.3 4 30.9 5 31.5	
	!	. ~	DG.			26.	26. 26. 26.	27.	27. 27.	27.	27.		27.	27. 27. 27.	28. 29.	
		¦ .	STIND			4.8	7.75	5.0	889	4.8 4.6	4.7		4.7	9.4 6.6 6.8	55.50	
S	BLEA	p	PCT.			91.3	91.6 91.0 90.7	90.7	90.1	90.06	7.68		92.9 94.5	91.5 91.0 91.3	90.8 91.1 91.2	
	PS	<u>-</u>	NO.			337	294 346 313	300	294 372 385	320 353	437		164 166	213 364 411	223 322 355	
		OARSE	NO.			09	52 66 55	51 75	54 81 85	98 121	119		47 41	60 83 78	47 79 84	
		FINE	QN -			75	68 68 70	64 63	99 19 99	99 99	09		70	75 70 63	67 63 60	
YARN PROPERTIES		. O	INDEX			102	98 96 103	93 91	98 94 94	96	16		98	98 98 97	93 77 74	
YARN PRO	NO	FINE	PCT.			5.1	4.8 4.7	4.4 4.7	444	4.2	4.1		4.5	4.9 5.2	4.9 6.9 9.9	
	ELONGATION	COARSE :	PCT.			6.7	5.5.9	5.5	5.3	5.4	5.5		5.8	6.1 6.2 6.6	5.7 6.3 6.4	
		NE I	LBS.			37	32 32 36	29 35	32 31 34	29 35	28		34 35	35 34 36	27 30 32	
	STRENGTH	COARSE	LBS.			112	97 98 107	90	100 97 105	89 105	90		103 105	105 105 107	87 95 99	
	0F.		NO.			Þ	20 3	6	125	ထက	3		ω	11 4 3	733	
		۰	2ND IN.	UP	1 !	35	34 35	34	34 35 36	34 35	35		33	33 34 35	30 31 32	
91100	TOOK,	0 47	CODE 32ND	E GRO		31	41	42	51	52	61		31	41	42	
GILOGO, P. 19 A T.S.	AREA,	ONAUE AND	NAME CC	MEDIUM STAPLE GROUP	SOUTH CENTRAL:	MID	SLM	SLM LT SP	LM	LM LT SP	860	SOUTHWEST:	MID	SLM	SLM LT SP	

43 SPY NO. 42 56 76 70 58 NO. PICKER & CARD WASTE 8.4 PCT. 6.4 6.3 5.9 7.2 7.3 9.6 8.0 8.4 8.5 8.3 8.8 PCT. UNITS COLOR OF RAW STOCK : Rd : +b 71.6 78.9 78.6 80.7 79.9 79.9 SHIRLEY ANALYZER NONLINT PCT. 22.5 2.7 3.7 3.2 1/8" ELON-GATION PCT. 0.9 5.6 6.2 6.0 5.8 5.5 8.8 FIBER STRENGTH STRENGTH ZERO: 1/8" GAGE: GAGE G/TEX 23 23 24 27 27 242 MPSI 89 91 96 95 92 92 MICRO-NAIRE 45 45 42 43 43 43 2.5% : 50/2.5 SPAN : UNIF. PCT. 45 45 45 94 43 45 43 F1BER LENGTH ž 1.05 1.10 1.04 NO. OF LOTS . N 39 5 S က CODE 32ND 34 35 36 35 33 AREA, GRADE AND STAPLE MEDIUM STAPLE GROUP STAPLE GROUP, LONG STAPLE GROUP
SOUTHEAST: 42 41 SLM LT SP SLM + NAME WEST: Q W

TABLE 3. -- CONTINUED

COLOR OF FINISHER DRAWING SLIVER 32.7 32.6 32.5 32.8 32.9 32.4 q-DYED PCT. Rd : 27.6 27.6 27.6 27.6 27.2 4.1 4.6 4.5 5.0 5.2 4.5 BLEACHED 92.4 91.6 91.8 92.8 90.2 426 388 378 324 391 170 68 86 123 120 89 14 PCT. INDEX INDEX 61 62 62 9 60 73 I APPEARANCE YARN PROPERTIES 113 79 79 80 78 78 4.5 4.5 5.2 5.0 4.7 ELONGATION 5.8 6.2 6.4 6.0 5.4 LBS. 32 37 48 45 27 37 STRENGTH 98 109 131 128 98 NO. OF LOTS NO. 39 2 2 m 36 35 36 33 MEDIUM STAPLE GROUP AREA, GRADE AND STAPLE STAPLE GROUP, LONG STAPLE GROUP 31 40 41 42 SLM LT SP SOUTHEAST: SLM + NAME WEST: SLM

TABLE 4.--COTTON: AVERAGE OF CLASSIFICATION, FIBER TESTS, AND YARN PROCESSING TESTS BY STAPLE GROUP, VARIETY AND STATE FOR SAMPLES FROM SELECTED 100 PERCENT ONE VARIETY GIN POINTS, CROP OF 1980.

STAPLE GROUP,	NO.	CLASSI	CLASSIFICATION		i i		FI		1/8#	SHIRLEY	į ÖZ	0F -	PICKER	1 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 1 1 1 1
VAKIEI AND STA		GRADE		2.5% SPAN	12	Э Ш	ERO AGE	1/8"   GAGE	GATION	ONLIN	p	Q +	A H	
	NON .	INDEX	32ND IN.	 	PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	UNITS	PCT.	NO.
SHORT STAPLE: 	т	76	59	0.95	111	43	91	20	5.7	2.8	72.7	10.5	7.0	32
MEDIUM STAPLE:	0	66	36	1.11	45	43	46	27	6.2	2.4	9.62	8.7	6.5	89
AGALA SJ-5 CALIFORNIA	က	96	36	1.13	45	42	98	27	6.1	2.4	80.0	7.7	5.9	78
COKER 304 ALABAMA	က	89	34	1.06	43	64	92	54	6.2	2.8	70.1	8.6	6.5	64
COKER 315 SOUTH CAROLINA	ဗ	91	34	1.11	1111	1111	06	54	5.7	3.1	70.0	9.0	7.3	61
DELTAPINE 26 MISSISSIPPI	2	06	34	1.08	43	94	46	24	5.4	2.9	71.2	8.4	7.4	52
DELTAPINE 41 ARIZONA MISSISSIPPI	ოო	96 85	35 35	1.11	†† ††	46 45	93 98	. 42 54	5.7	3.2	79.3	8.6	6.8 7.4	57 59
DELTAPINE 55 ARIZONA LOUISIANA	£ 4	100 93	35 34	1.09	43 42	47	89 92	23	5.9	2.2	81.1	8.3	6.5	56 43
DELTAPINE 61 ARKANSAS GALIFORNIA MISSISSIPPI	യവത	89 100 92	35 35 34	1.10	42 42 45	47 452 465	93 88 88	23 23 23	6.50	22.7	71.2 79.6 73.5	88.5.	00.0 0.00	51 49 51
DELTAPINE 70 ARIZONA	ဗ	100	35	1.11	42	44	87	23	5.9	2.2	80.7	8.4	6.1	57

	APLE GROUP,   NO.				9 123 44	3 >135 49	3 98 32	COKER 315 SOUTH CAROLINA 3 110 38	2 103 34	3 109 36 3 107 37	3 104 34 4 90 30	3 105 36 5 104 34 3 105 33	
	NGAT	COARSE : FINE	PCT. PCT.	6.8 5.9	6.4 5.2	6.5 5.4	5.8 4.7	6.3 4.9	5.8 4.5	6.2 4.9 5.8 4.5	5.9 4.6 5.4 4.7	6.3 6.0 7.0 7.0	
OPERT	APPEARANCE	COARSE : FINE	INDEX INDEX	113 100	78 61	83 60	93 60	93 60	115 75	83 60 90 67	83 60 98 62	83 63 84 62 97 67	
	NEPS	COARSE : FIN	NO. NO.	8 55	127 361	188 461	81 275	78 453	31 195	78 345 54 347	54 307 42 332	84 447 53 350 38 331	
R 0F	BLEACHED	Rd : +b	PCT. UNITS	91.8 5.5	90.5 4.3	92.2 4.6	90.2 5.1	90.8 4.8	9.4 4.06	93.0 4.1 91.8 4.0	92.2 4.1 90.8 4.4	89.9 4.9 91.9 4.5 91.7 4.4	
FINISHER DRAWING SLIVER	DYED	Rd : -b	PCT. UNITS	27.1 32.6	27.8 32.4	28.0 32.2	27.4 32.4	27.7 32.5	27.6 32.4	26.8 33.2 28.0 32.5	28.3 32.5 27.2 32.8	26.9 33.0 28.0 32.6 26.9 32.9	

SPY NO. . N 52 51 49 43 40 54 27 55 55 41 PICKER & CARD WASTE PCT. 5.9 7.8 7.7 8.0 6.2 7.2 6.9 8.4 8.4 8.5 UNITS COLOR OF RAW STOCK 9.6 8.6 **q**+ 11.0 10.0 8.8 9.2 10.1 5 ω. PCT. 69.2 71.0 80.1 77.2 69.6 4.99 Rd 75.4 70.3 0.69 72.3 SHIRLEY ANALYZER NONLINT PCT. 4.9 2.6 2.8 2.7 4.6 4.2 3.3 1.9 3.0 9.4 1/8" ELON-GATION PCT. 5.4 5.8 5.6 6.1 55.3 9.4 5.5 5.7 |-----| | ZERO : 1/8" | | GAGE : GAGE | G/TEX 23 FIBER STRENGTH 24 24 25 233 23 22 22 22 22 2 21 MPSI 95 888 94 91 95 93 46 91 MICRO-NAIRE RDG. 43 64 48 48 45 46 48 64 45 47 47 2.5%: 50/2.5 | SPAN: UNIF. PCT. 9t 144 43 **†**† 94 **†**† 43 43 43 41 43 F1BER LENGTH 1.08 ž 1.10 1.06 1.09 1.09 1.09 1.04 0.97 STAPLE CLASSIFICATION 32ND IN. 35 35 33 32 34 34 35 34 GRADE INDEX 26 85 80 80 91 97 99 83 87 83 NO. OF LOTS . 9 3 3 3 3 ကက 949 3 3 STONEVILLE 213 ARKANSAS SOUTH TEXAS STONEVILLE 825 DIXIE KING III GEORGIA STAPLE GROUP, VARIETY, AND STATE ARIZONA LOUISIANA MISSISSIPPI DES 56 MISSISSIPPI MEDIUM STAPLE: MC NAIR 220 ALABAMA MC NAIR 235 ARKANSAS VAIL 7 ARKANSAS LONG STAPLE: COKER 310 GEORGIA

TABLE 4. -- CONTINUED

	SLIVER	DYED	q- :	UNITS	33.1	31.4	32.6	31.9	33.4 33.1	33.0 33.1 32.9	33.3	32.1
	ER DRAWING SLIVER	! ! !	Rd	PCT.	26.9	27.5	26.7	27.8	26.4 27.0	27.1 26.7 26.9	26.2	27.7
	OF FINISHER	BLEACHED	<b>q</b> +	STIND	4.6	6.7	5.1	4.8	4.6 4.8	4.3 4.9	4.9	5.8
	o 	! ! !	Rd	PCT.	91.2	88.2	6.06	89.8	91.1 92.4	91.5 91.5 89.7	89.3	90.1
		NEPS	 N. N. M.	. 0N	163	205	221	260	253 174	330 452 484	604	110
1			COARSE	NO.	34	59	47	78	52 63	83 123 120	129	15
1 1 1			FINE	INDEX	73	70	80	19	73 87	09 09	29	73
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	PROPERTIES	APPEARANCE	COARSE:	INDEX	110	107	113	93	100	80 82 92	100	110
1	YARN	TION	FINE	PCT.	4.8	4.8	4.7	4.5	4.6	4.7 4.2 4.2	0.4	4.4
		ELONGATION	COARSE	PCT.	6.0	5.4	0.9	5.8	5.9	5.55	5.0	5.2
		NGTH	FINE	LBS.	37	26	36	34	32	32 29 29	27	26
		STRENGTH	COARSE : FINE	LBS.	110	83	107	103	99	98 97 92	98	82
		NO. Lots		NO.	ო	က	က	က	ოო	m <b>4</b> 0	ю	m
	STAPLE GROUP, VARIETY, AND STATE				MEDIUM STAPLE: DES 56 MISSISSIPPI	DIXIE KING III GEORGIA	MC NAIR 220 ALABAMA	MC NAIR 235 ARKANSAS	STONEVILLE 213 ARKANSAS SOUTH TEXAS	STONEVILLE 825 ARIZONA LOUISIANA MISSISSIPPI	VAIL 7 ARKANSAS	LONG STAPLE:  COKER 310 GEORGIA

TABLE 5.--COTTON: AMERICAN UPLAND SHORT STAPLE FIBER AND YARN QUALITY CHARACTERISTICS BY PRODUCTION AREA AND CLASSIFICATION, CROP OF 1980.

	×¥_	PCT.		7.5		6.9 6.5 6.6		6.7 8.3 7.1		7.7 21		7.17.2		7.0	
COLOR OF RAW STOCK	100	2		42-1 42-1 41-3		22-2 22-2 22-2		21-4 42-1 32-2		21-4 31-3 22-2		33-1 33-1 32-1		21-4 21-4 43-1	
	q+	UNITS		9.0 10.0 9.1		10.4 10.7 10.4		9.8 10.1 10.2		9.8 9.3 10.4		11.0		9.4 9.8 10.6	
	1	PCT.		72.0 70.5 71.8		75.5 74.5 75.0		75.5 69.5 72.7		75.3 75.2 74.7		71.3		77.0 76.5 67.7	
AALYZER	TOTAL	PCT		4.5 5.3		2.7		2.4 3.1 3.4		3.7 4.3		2.9		3.3 4.0	
SHIRLEY A	SIBLE: ASTE:	PCT.		3.33.7		2.0		1.9 1.9 1.9		3.15		1.6		2.58	
!	NO L	PCT.		5.78		4.7 5.3 5.5		0.00 0.00		5.7.0		55.57		5.3.0	
FIBER	1/8" GAGE	G/TEX	) PERCENT	21 21 22	5 PERCENT	17 17 20	7 PERCENT	20 22 22	8 PERCENT	19 20 22	) PERCENT	21 20 20	5 PERCENT	22 19 21	
	ERO AGE	MPSI	06	90 85 87	6	95 95	.6	94 95 90	6	90 91 93	100	89 90 93	1	96 88 94	
	MAIRE	RDG.		47 43 41		34 41 43		47 74 48		39 40 40		43 42 43		7 7 7 7 7 7 7 7	
FIBER	5	PCT.	_	7 7 7 7	43 44 44	571	4 4 5 5 6 7	3.7	44 45 47		43 45 45		46 45 46		
	.5% PAN :		LANKART 611	0.96	LANKART 57	0.87 0.89 0.92	LANKART LX571	0.97 0.97 0.95	TAMCOT SP-3	0.97 1.00 0.96	GP 3774	0.93 0.96 0.96	LANKART 57	0.96 0.94 0.96	0
EA	Ш	32ND IN.		30 32 32	_	28 29 29	_	300 300 300	_	300 300 300 300	0	29 29 29	_	29 29 29	70 70114076
PRODUCTION AREA	ASS111C	CODE	ST TEXAS	SP 42 SP 42 SP 52.1	Έ	SP 32 SP 32 SP 32	NO.	31 - SP 42 - SP 32		41 41 - SP 42	EW	. SP 32 . SP 32 . SP 32	0	, 41 43 43	ביוויסדק כיו אסקד ע
PRC	-	NAME	SOUTH WES CENTRAL BYERS	SLM LT SLM LT LM LT	COMMERCE	M M M LT	COVINGTON	SLM LT	FERRIS	SLM SLM SLM	GRANDVIEW	333 111	HOLLAND	SLM SLM SLM SP.	1/ promore

 $\frac{1}{2}I$  REDUCED FROM 42 BECAUSE OF GRASS.  $\frac{2}{2}I$  COTTON STUCK TO PROCESSING ROLLS.

TABLE 5. -- CONTINUED

PRODUCTION AREA					YARN	PROPERTIES	IES ·	1		1		JR 0F F	iz	i Z	\   \   \	1
AND CLASSIFICATION		STRENGTH		ELONGA	   Z	APPEAR	ANCE	ıΨ		 ¦	5		BLEA	!	λO	Q.
GRADE : STAPLE	LE -	s : :	I	8s ::	S		22s		22s	NO.	2 2	q+	Rd	q+	Rd	q- 
NAME CODE 32ND		S.		CT.	<u>.</u>	DEX	ON I		NO.	NO.	1 .	UNITS	۱.	UNITS	PCT.	UNITS
SOUTH WEST CENTRAL TEXAS BYERS		LANKART (	611				90 PI	PERCENT								
SLM LT SP 42 30 SLM LT SP 42 30 LM LT SP 52-1/32	0.01	289 252 8314 10	91 84 07	7.2 6.5 7.7	6.0 5.6 7.1	120 120 100	120 110 110	980	18 24 22	41 31 54	67.3 72.7 73.8	10.2 10.4 9.9	89.0 89.5 91.5	6.57 8.58	30.4 29.5 30.7	28.1 31.0 30.5
COMMERCE		LANKART	25				95 PI	ERCENT								
M LT SP 32 29 M LT SP 32 29 M LT SP 32 29	m = -	242 263 271	68 81 87	5.8 6.5 7.0	4.9 5.7 6.2	100 120 120	110 120 110	12 12 6	75 77 77 77 77 77 77	$\frac{14}{31}$	77.4 76.1 76.6	10.6 10.9 10.9	92.1 92.1 90.5	55.7	27.2 26.7 26.8	32.2 32.8
COVINGTON		LANKART	LX571				97 Pt	ERCENT								
M 31 30 SLM LT SP 42 30 M LT SP 32 30	0.0.5	287 267 272	90 85 80	7.0 6.0 6.8	5.9	130 130 130	110	000	56 26 18	37 36 31	78.1 73.8 75.2	10.2 10.8 10.7	92.3 91.0 89.5	5.87	27.1 26.3 26.2	32.8 32.8 32.4
FERRIS		TAMCOT SE	SP-37				98 PI	ERCENT								
SLM 41 30 SLM 41 30 SLM LT SP 42 30	000	277 290 285	92 91 93	6.7 7.6 7.3	6.9	130 120 120	110 100 120	2 N O	38 16 24	41 40 37	78.2 78.5 77.1	10.3 10.2 10.6	92.7	55.0 30.0	27.8 28.3 27.1	32.0 31.9 32.4
GRANDVIEW		GP 3774					100 PI	PERCENT								
M LT SP 32 29 M LT SP 32 29 M LT SP 32 29	000	243 254 268	76 80 86	6.6 6.7 7.1	6.385	110 120 110	90 100 110	8 10 6	64 70 30	30 31 35	74.0 75.5 76.7	11.1	92.0 92.3 91.1	55.4	27.0 27.0 27.4	32.5 32.6 32.6
HOLLAND		LANKART	25				75 PI	ERCENT								
SLM 41 29 SLM 41 29 SLM SP' 43 29	000	260 8 263 8 264 8	84 86 83	5.1 6.8 6.3	5.05	120 120 120	120 110 130	††† 8	144 40 32	33 36 36	78.9 78.8 71.5	10.0	92.1 92.8 92.3	5.72	26.9 27.0 27.1	32.7 32.7 32.5
TREDUCED FROM 42 BECAUSE OF GRASS.	SAUSE ED VAL	OF GRASS. .UE BELOW TH		RANGE OF	THE	TEST.										

TABLE 5.--CONTINUED

PICKER	<u>×</u> ¥_	PCT.		8.0 7.5 7.0		7.2 7.1 7.5		6.9		7.9		7.4	
*	: COLOR : CODE	NO.		22-2 32-1 32-2		21-4 31-4 31-4		43-1 42-2 43-1		31-4 31-4 21-4		42-2 32-2 42-1	
COLOR OF RAW STOCK	i	UNITS		10.0 9.8 9.8		9.2 9.6 9.5		10.4 9.2 10.4		8.5 9.5 4.0		9.6	
	Rd	PCT.		75.2 74.5 71.7		76.0 75.4 74.0		68.0 70.0 70.0		75.2 75.3 77.0		70.0 73.0 71.2	
ANALYZE LINT	TOTA:	PCT.		33.8		3.9		3.75 3.86 3.86		5.0 5.8 1.8		7.7.0 5.00	
	VISIB	PCT.		8.0 8.0 8.5		2.5 2.7 3.4		2.4 3.9 2.8		3.9 2.5 2.4		2.50 2.00 2.00	
1/8"	20	PCT.		5.33		6.1 6.1 6.3		6.0 7.0 6.1		6.3 6.5		5.5	
IBER RENGTH		G/TEX	90 PERCENT	18 21 20	70 PERCENT	21 21 24	70 PERCENT	22 22 22	80 PERCENT	23 22 22	80 PERCENT	22 22 23	
		MPSI		91 96 96		88 88 88		89 78 89		88 85 87		91	
		RDG.		†† †† ††		41 41 36		46 39 42		37 37 39		24 94 24	
FIBER LENGTH	50/2.5 UNIF.	PCT.	571	44 44 43		44 44 43	37н	45 42 43		91 11 91	571	10 E 11 11 11 11 11 11 11 11 11 11 11 11 1	
	-1 2.5% :	 	LANKART LX571	0.94 0.98 0.94	GSA 71	0.97 0.97 1.00	TAMCOT SP-37H	0.99 1.03 0.97	QUAPAW	1.05	LANKART LX571	0.99 1.01 0.99	F BARK. F BARK.
REA	LE	32ND IN.		29 29 29		30 31 32		31 32 32		32 33 33		322	SECAUSE OF
PRODUCTION AREA	AND CLASSIFICALION	CODE	T TEXAS	41 41 SP 42	ΑΥ	SP 42 SP 42 SP 42	ING	43 SP 5211 5321		SP 42 SP 42 SP 42	VETT	SP 42 SP 42 SP 42	FROM 42 FROM 43 E
PROI	1	NAME	SOUTH WEST NORTHWEST · TEMPLE	SLM SLM SLM LT	ABERNATHY	SLM LT SLM LT SLM LT	BIG SPRING	SLM SP LM LT LM SP	BOVINA	SLM LT SLM LT SLM LT	BURKBURNETT	SLM LT SLM LT SLM LT	1/ REDUCED FROM 42 BECAUSE OF BARK. REDUCED FROM 43 BECAUSE OF BARK.

TABLE 5. -- CONTINUED

PRODUCTION AREA					YARN	PROPERTIES	I ES				1 1	R 0F	FINISHER DRAWING	DRAWING	SLIVER	
AND CLASSIFICATION	NOI	STRENGTH		S		APPEARANCE		NEPS		2	1 	           	BLE	HED	DYED	GD
GRADE :	ا لنا ا			88 :			22s		22s	NO.	Rd :	! !	Rd	q+	l p	1
NAME CODE	32ND IN.	LBS.	LBS.	PCT.	PCT.	X	INDEX	NO.		NO.	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
SOUTH WEST . NORTHWEST TEXAS TEMPLE		LANKAR	LANKART LX571	-			90 PE	PERCENT								
SLM 41 SLM 11 SLM LT SP 42	29 29 29	260 278 276	77 200 300	5.2 6.8 7.0	4.455.7	110 120 120	120 110 110	26 8	34 70 50	36 37 34	77.5 17.5 74.7	10.2 10.2 10.5	91.6 92.6 90.2	4.7 5.7 5.5	26.9 27.7 27.2	33.1 32.3 32.6
ABERNATHY		GSA 71					70 PE	PERCENT								
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	30 31 32	297 318 326	98 98 102	7.5 7.5 8.4	6.4 6.9	120 120 120	110 120 110	929	24 14 16	44 47 51	86.7 76.1 76.9	10.0 10.2 9.7	91.0 90.4 89.5	5.50	27.8 28.9 29.3	32.1 31.3 31.2
BIG SPRING		TAMCOT	TAMCOT SP-37H	· ·			70 Pf	PERCENT								
SLM SP 43 LM LT SP 52 1J LM SP 53 2J	31 32 32	303 301 313	96 97 101	7.0 7.8 7.3	6.1 6.6 6.1	110 110 130	120 100 120	79	26 28 44	49 52 51	69.2 73.1 71.5	11.4 10.0 10.9	91.0 90.0 90.2	5.5.5 5.4.4 5.4.4	26.8 30.7 28.2	32.6 30.3 31.9
BOVINA		QUAPAW					80 PE	PERCENT								
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	32 33 33	337 335 330	109 105 105	7.9 8.8 7.9	6.8 7.3 6.5	130 120 130	120 120 120	500	24 8 24	57 57 57	87.8 78.2 77.5	9.7 9.5 10.1	92.4 92.2 92.1	4.5 5.3 4.7	27.4 29.2 27.2	32.0 31.2 32.6
BURKBURNETT		LANKAR	LANKART LX571	-			80 PF	PERCENT								
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	32 32	292 287 294	93 89 95	6.5	5.5 6.2 6.2	130 120 120	120 110 120	<i>4</i>	34 16 26	44 35 43	73.1 74.2 68.1	10.3 10.5 10.0	90.8 90.3 90.0	50.00 50.00	28.4 26.9 27.4	31.8 32.4 32.1
JREDUCED FROM 42 8	BECAUSE BECAUSE	OF BARK. OF BARK.														

TABLE 5. -- CONTINUED

PICKER	& CARD  WASTE 	PCT.		6.4 6.4 7.5		9.4 10.1 8.6		8.2 10.1 9.9		8.2 7.0 2/ 8.4 7.0		7.9 7.8 9.5 21	
	LOR DE	NO.		41-3 31-4 42-1		42-2 32-2 42-2		$\frac{31-4}{33-1}$		42-2 42-1 32-2 42-1		32-2 31-3 42-1	
COLOR OF RAW STOCK	+	UNITS		9.4 9.0 8.7		9.1 10.0 9.8		9.4 10.4 10.2		9.4 9.0 9.4		9.6 9.1 9.3	
	Rd	PCT.		74.0 74.0 71.3		69.4 71.5 68.0		73.4 72.5 74.0		68.4 71.3 73.0 70.0		73.3 75.0 70.1	
ANALYZER I	TOTAL WASTE	PCT.		3.9 4.0 4.0		7.2 6.2 6.1		6.3		4.01 4.01		3.6 4.7 7.0	
SHI	VISIBLE WASTE	PCT.		2.0 2.0 1.9		5.5 5.0 5.0		3.7 3.8 4.0		23.27		2.8 4.9	
1/8"	ELON- I GATION I	PCT.		6.4 6.8 6.7		6.0 7.1 6.1		50.0 50.0 50.0		6.2 7.1 6.7 7.0		50.0 50.0 50.0	
FIBER STRENGTH	1/8"   GAGE	G/TEX	90 PERCENT	21 23 21	70 PERCENT	22 22 21	O PERCENT	21 21	90 PERCENT	21 23 22 22	5 PERCENT	22 23 24	
FI	ER AG	MPS1	6	85 88 88	7	88 81 85	90	84 93 90	6	8888 555 7	7	87 89 85	
	MICRO-	RDG.		43 43 43		41 39 41		45 43 46		36 45 35		45 39 37	
 	50/2.5 UNIF.	PCT.	-	44 44 43	37	42 41 40		43 45 44	202	t t t t t t t t t t t t t t t t t t t	21	44 44 42	
FIBER	2.5%: SPAN:	. Z	LANKART 611	0.95	TAMCOT SP-3	1.02	LANKART 57	0.98 0.95 0.96	PAYMASTER	1.03 0.98 1.04 0.97	TAMCOT SP-2	0.99	BARK. ROLLS. BARK.
EA	TION  STAPLE	32ND IN.	٦	31 32 31	Г	3328	7	1 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ш.	321	_	32 32 32	BECAUSE OF PROCESSING BECAUSE OF
PRODUCTION AREA	SSIFICA	CODE	TEXAS	41 SP 42 SP 42	CITY	53 53 <u>1</u> 1 53 <u>1</u> 1		SP 42 SP 42 SP 42		43 SP 42 SP 42 43 3J		SP 42 SP 42 43	43 TO 33
PROD	AND CLA	NAME	SOUTH WEST NORTHWEST CHALK	SLM SLM LT SLM LT	COLORADO CITY	LM SP LM SP LM SP	CROWELL	SLM LT SLM LT SLM LT	DIMMITT	SLM SP SLM LT SLM LT SLM SP	DODSON	SLM LT SLM LT SLM SP	1 REDUCED FROM 2 COTTON STUCK 3 REDUCED FROM

TABLE 5. -- CONTINUED

PRODUCTION AREA	1				ARN	PROPERTIES	I ES			1		OR OF	ER	DRAWING	SLIVER	
FICAT		STRENGTH		ELONGATIO	NOIL	APPEARANCE	ANCE	NEPS	1 1	700	GRAY		BLEAC			!
GRADE :		8s :	S	88 :	S		22s	8s ::	2 s	NO.	Rd		Rd	q+	Rd	
NAME CODE 32ND		S.	S.:	cT.		INDEX	INDEX	NO.	NO.	NO.	١.		PCT.		<u> </u>	UNITS
SOUTH WEST NORTHWEST TEXAS CHALK		LANKART	611				90 PE	PERCENT								
SLM 41 31 SLM LT SP 42 32 SLM LT SP 42 31		276 295 287	87 95 90	6.9	6.0 6.0 6.0	120 120 120	110 120 120	8 0 01	24 26 20	39 46 42	75.6 69.2 68.8	6.60 6.00	90.6 89.8 89.5	55.5	27.2 29.6 28.0	32.3 30.8 32.0
COLORADO CITY		TAMCOT	SP-37				70 PE	PERCENT								
LM SP 53 32 LM SP 531 32 LM SP 531 32		290 303 304	96 96 98	7.0 8.3 7.5	6.4 6.9 7.0	130 120 110	110 90 110	804	20 62 32	49 52 48	66.3 70.5 71.9	10.2	89.8 90.4 90.8	5.5.8 5.98	28.8 31.1 27.8	31.4 29.7 32.2
CROWELL		LANKART	57				90 Pt	PERCENT								
SLM LT SP 42 31 SLM LT SP 42 31 SLM LT SP 42 31		287 284 279	90 85 87	7.1	6.5	120 120 120	100 110 110	000	56 50	36 37 33	74.3 74.0 68.4	10.5 11.2 10.4	90.1 90.8 90.1	5.4	26.6 27.3 27.3	32.9 32.0 32.2
DIMMITT		PAYMASTER 202	ER 20.	2			90 PI	PERCENT								
SLM SP 443 31 SLM LT SP 42 31 SLM LT SP 42 31 SLM SP 42 31		307 322 299 315	102 103 97 99	8.0 8.0 7.3 8.1	6.1 7.0 6.5 6.8	120 120 110 130	120 100 110	10 12 12 4	38 34 52 14	49 48 51 50	74.4 76.4 74.3 73.3	10.2 9.8 10.4 10.8	90.0 92.6 90.9 93.6	6.1 4.9 3.8	29.2 29.0 26.8 28.4	30.9 31.5 33.0 32.2
Nosgod		TAMCOT	SP-21				75 PH	PERCENT								
SLM LT SP 42 32 SLM LT SP 42 32 SLM SP 43 32		295 289 312	96 95 102	7.1	4. 6.2 6.4	130 120 110	110	789 08t	42 30 48	46 45 54	75.2 76.1 67.3	10.2	90.6	5.5	28.7 26.8 28.2	31.7 32.8 31.7
1 REDUCED FROM 43 BEC	BECAUSE OF BECAUSE OF	OF BARK. OF BARK.														

TABLE 5. -- CONTINUED

PRODUCTION AREA	AREA		FIBER LENGTH		FISTR	FIBER STRENGTH	1/8#	SHIRLEY NONL	LEY ANALYZER   NONLINT		COLOR OF RAW STOCK	· ·	PICKER
SSIFI	1 -	2.5%	: 50/2.5	MICRO-	ZERO	: 1/8"	ELON- GATION	VISIBLE	TOTAL			COLOR	& CARD
ADE	APL	- SPAN		_	GAGE	: GAGE	1	WASIE	: WASIE	Rd	9+	CODE	
NAME CODE	32ND IN.	ž	PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
SOUTH WEST NORTHWEST TEXAS EARTH		GSA 71			80	85 PERCENT							
LM LT SP 52 SLM LT SP 42 SLM LT SP 42	32 32 32	1.02	41 41 44	36 35 37	83 80 83	24 22 21	7.6 7.1 6.0	33.4	7.46.0	74.1 74.0 74.4	9.0	31-4 31-4 31-4	9.8 8.4 7.7
FLOYDADA		STRIPPER	31		7	5 PERCENT							
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	31 30 30	0.95 0.93 0.91	425 452 452	†† 0†† 1††	888 86 89	21 20 21	5.9	2.5 3.5	4.0 4.3 6.4	74.0 75.3 72.5	9.00 9.50	31-4 31-3 32-2	7.2
HALE CENTER		GSA 71			80	5 PERCENT							
LM 51 SLM 41 SLM LT SP 42	33 32 32	1.01	4 4 4 5 2 2	37 38 37	84 80 79	23 23	7.17.47.8	4.0 2.6 2.6	5.6 4.2	74.4 76.2 74.0	8 9.0 0.0	41-3 31-3 31-4	8.9 8.1 8.1
HAMLIN		LANKART	611		8	5 PERCENT							
SLM SP 43 SLM SP 43 SLM SP 43	188 118	0.96	43 42 43 43	41 42 43	83 82 84	20 19 21	7.0 7.1 6.8	2.7	5.2 6.1 4.4	67.3 67.0 67.7	9.6 10.2 10.1	42-2 43-2 43-2	8.0 9.0 7.2
LEVELLAND		GSA 71			7	5 PERCENT							
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	32 32 32	1.00 0.99 1.01	7 7 7 7 7 7 7	39 42 40	85 85 85	21 20 23	5.8	2.9 2.9 8.9	3.4 4.9	73.0 74.0 74.4	9.6	41-3 31-4 31-4	7.6
NEW DEAL		STRIPPER	32		6	90 PERCENT					٠		
SLM LT SP 42 SLM 41 SLM LT SP 42 LM LT SP 52 21	32 32 32 32	1.01 1.04 0.97 0.97	44 47 47 45	40 39 43	91 88 89	23 25 25 25	0.00 0.00 0.00 0.00	300.2 80.3 80.3	53.45 50.45	75.3 75.3 75.0 71.0	9.6 9.6 9.6	31-4 31-3 31-3	7.3 6.3 7.2
11/COTTON CTION TO													

JICOTTON STUCK TO PROCESSING ROLLS. ZAREDUCED FROM 42 BECAUSE OF BARK.

TABLE 5. -- CONTINUED

PRODUCTION AREA		i		YARN	PROPERTIES	TES				1	OR 0F	FINISHER	DRA	LIVE	
AND CLASSIFI	TRE	i	ELONGATION	TION	APPEAF	ANCE	Z			18	1	BLEA			DYED
GRADE : STAPL	ı ı ı	22s		22s	88	22s	1	22s	NO.	Rd	q+		ı	Rd	q- 
NAME CODE 32ND IN.	LBS.	LBS.	•	PCT.	INDEX	2	0.		NO.	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
SOUTH WEST NORTHWEST TEXAS EARTH	GSA 7	7.1				85 6	PERCENT								
LM LT SP 52 32 SLM LT SP 42 32 SLM LT SP 42 32	321 339 325	101 103 104	8.0.0 8.8	7.3	110 120 120	110	28 2 2	30 20 24	51 54 57	87.6 78.2 77.7	9.8 9.7 9.6	93.7 91.3 94.5	4.6 4.9 4.2	29.8 29.1 28.9	30.9 31.4 31.4
FLOYDADA	STRIPPER	PER 31				75 1	PERCENT								
SLM LT SP 42 31 SLM LT SP 42 30 SLM LT SP 42 30	318 299 277	103 94 85	7.5	6.7	120 120 120	120 120 110	0 t 8	50 26 34	51 41 36	76.4 69.8 73.7	9.8 9.6 10.1	91.9 89.6 88.2	5.0	28.8 28.5 30.0	31.7 31.6 30.5
HALE CENTER	GSA 7	7.1		,		85 F	PERCENT								
LM 51 33 SLM 41 32 SLM LT SP 42 32	316 317 319	100	8.5	6.5 7.4 7.5	130 120 120	120 120 110	± 7.9	20 26 44	54 52 54	87.8 78.4 76.7	9.3 9.6 10.3	92.6 90.9 91.7	4.6 5.2	28.9 28.2 28.9	31.1
HAMLIN	LANKART	1RT 611				85 F	PERCENT								
SLM SP 43 31 SLM SP 43 31 SLM SP 43 31	279 274 294	90 85 89	7.8 8.0 8.1	6.8 6.7 7.1	110	120 110 110	404	50 62 15	33 38 40	64.3 69.5 70.1	10.5	88.8 89.1 89.6	5.2	27.9 27.0 30.0	31.4 32.6 30.3
LEVELLAND	GSA 7	7.1				75 8	PERCENT								
SLM LT SP 42 32 SLM LT SP 42 32 SLM LT SP 42 32	283 321 333	91 103 112	7.3 8.4 7.8	6.1	120 120 120	110	14 8 16	60 36 26	42 50 53	75.3 77.7 76.0	10.1 9.4 10.1	90.6	5.4 5.8	29.6 28.7 28.2	31.0 31.8 32.0
NEW DEAL	STRIPPER	PER 32				90	PERCENT								
SLM LT, SP 42 32 SLM 41 33 SLM LT SP 42 32 1J LM LT SP 52 32 1J	326 331 334 311	107 107 113 99	6.7 8.0 7.9	5.9 7.3 6.6	120 120 110	0000	0022	32 34 11	53 48 45	87.2 77.5 70.9 73.9	9.7 9.6 10.1	92.6 91.4 91.1 89.1	5.2.1.0	29.7 30.3 25.8 30.1	31.2 30.7 33.5 30.4
1 BEDIICED FROM 42 BECAUSE	SF OF BARK	,													

1 REDUCED FROM 42 BECAUSE OF BARK.

TABLE 5. -- CONTINUED

COLOR OF RAW STOCK	: +b : CODE	T. UNITS NO. PCT.		2 10.1 42-1 8.3 2 10.0 32-2 7.7 0 10.2 32-2 7.4		4 8.9 31-3 5.9 0 8.5 31-3 6.5 0 9.4 31-4 7.9		) 10.6 43-1 7.8 9.8 42-1 8.1 5 10.0 42-1 6.1		9.7 32-1 7.9 12.2 33-4 8.2 7 11.2 33-2 8.7 10.4 33-2 7.9		9.8 32-1 10.	0 9.4 31-4 9.0 0 8.9 41-3 8.3
ANALYZER	: TOTAL	. PCT. PCT		4.7 70.2 3.8 72.2 4.7 72.0		2.5 76.4 3.3 76.0 4.5 75.0		4.6 63.0 5.3 70.0 4.0 69.5		4.4 74.0 4.9 70.0 4.7 69.7 4.8 71.2		6.0 75.	7.5 15. 4.5 73.
SHIR	VISI	PCT. PCT.		6.2 3.1 7.2 1.9 7.8 2.4		7.2 1.7 6.5 1.8 6.9 2.7		5.4 3.0 6.7 3.2 6.1 2.9		6.9 7.6 6.0 6.0 8.9 6.0		5.8 4.7 6.6 4.1	.8
FIBER	ERO: 1/8" AGE: GAGE	MPSI G/TEX	70 PERCENT	88 22 84 21 81 20	80 PERCENT	82 83 85 21 85	85 PERCENT	86 22 85 21 85 20	70 PERCENT	85 82 86 86 80 21	70 PERCENT	89 23	7
 1 1 1 1	0/2.5   N UNIF.	PCT. RDG.		44 44 43 40 42 41		44 43 42 42 43 39	SP-44	41 38 41 37 42 44	-	47 42 47 39 42 42 42 41		45 43 47 42	
FIB	2.5% : LE.   SPAN :	32ND IN. IN.	LANKART <sup>°</sup> 611	29 0.93 31 0.96 31 0.96	GSA 71	32 0.99 32 1.00 32 1.00	WESTERN SP	31 0.98 32 1.01 32 0.98	LANKART 611	32 0.98 32 1.04 32 1.03 31 0.97	GSA 71	30 0.95 32 0.97 30 0.97	
PRODUCTION AREA	GRADE	NAME CODE 32	SOUTH WEST NORTHWEST TEXAS RHINELAND	SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	SILVERTON	SLM 41 SLM 41 SLM LT SP 42	SNYDER	LM SP 53 11 LM SP 53 11 LM SP 53 11	SPUR	SLM LT SP 42 SLM SP 43 SLM SP 43 SLM SP 43	ТАНОКА	LM LT SP 52 SLM LT SP 42 SIM IT SP 42	5

The puced from 43 BECAUSE OF BARK. 2 COTTON STUCK TO PROCESSING ROLLS. 3 REDUCED FROM 52 BECAUSE OF BARK.

TABLE 5. -- CONTINUED

	DYED	q- ::	STIND		33.0 31.9		31.6 31.6 32.0		32.5 31.2 32.6		31.9 31.4 32.5 32.8		31.7 30.9 32.0		31.6	
SLIVE		Rd	i .		25.9 26.0 28.6		28.7 28.5 28.0		26.7 29.4 27.4		28.0 28.7 26.4 26.4		28.3 29.4 28.2		28.5	
I A		9+	UNITS		4.00 1.00		7.0 4.0 6.0		5.7 4.9		47.7.7. 9.8.8.9		5.40		6.0	
FINISHER	BLEA	Rd	PCT.		89.5 90.3 91.2		90.5 93.2 90.8		89.4 91.3 90.0		90.9 91.1 89.8 89.8		91.3 92.5 89.2		90.8	
OR OF	 		UNITS		10.3		9.5		11.3		9.11.13.13.13.13.13.13.13.13.13.13.13.13.		10.6 10.0 10.4		10.7	
00	GR,	Rd	PCT.		67.0 68.1 73.2		77.5		64.7 71.7 71.1		77.0 65.0 65.6 66.7		85.2 86.2 73.8		72.6 68.4	
			NO.		38 45 49		52 49 52		47 52 47		t t t t t t t t t t t t t t t t t t t		43 40 43		35 41	
	l 	22s	NO NO		50 74 32		24 28 14		44 54 16		24 68 44 30		0 70 70 70 70		28 42	
	NEP	1	NO.	PERCENT	10 8 18	PERCENT	† <b>8</b> †	PERCENT	10 14	PERCENT	8 01 01	PERCENT	000	PERCENT	0	
ES			INDEX	70	110	80	120 120 110	85	120 70 110	70	110 100 100 120	70	120 110 110	80	90	
PROPERT	_	. ~	INDEX		110		130 130 120		120 100 120		120 110 110		120 120 120		120	
i	NO.	22	PCT.		5.8 6.9 7.1		6.8 6.8 6.8		6.9		6.6 6.9 6.9		5.9 6.2 6.4		6.5	
	ELON	1 00	PCT.		7.0		7.78.3	41	7.8 7.8 7.6		7.5 7.9 8.0 7.5		6.7 6.8 7.4		7.6	
	1	22	LBS.	T 611	88 92 95		102 95 100	N SP-44	97 100 98	T 611	98 95 91		95 94 95		91	
	STREN	l I I	LBS.	LANKART	275 298 301	GSA 71	310 303 311	WESTERN	300 306 303	LANKART	310 305 292 292	GSA 71	294 291 293	GSA 71	285 285	i i
		TAPLE	32ND IN.		29 31 31		32 32 32		31 32 32		32 32 31		30 32 30		31	1
PRODUCTION AREA	SIFI		CODE 32	TEXAS	SP 42 SP 42 SP 42	z	41 41 SP 42		53 T 53 T 53 T		SP 42 43 43 43		SP 52 SP 42 SP 42		SP 52 82 2J	
PRODUC		GR	NAME	SOUTH WEST NORTHWEST TEXAS RHINELAND	SLM LT S SLM LT S SLM LT S	SILVERTON	SLM SLM SLM LT 3	SNYDER	LM SP LM SP LM SP	SPUR	SLM LT SLM SP SLM SP SLM SP SLM	TAHOKA	SLM LT SLM LT SLM LT S	TOKIO	LM LT'S BG	Toronal

JREDUCED FROM 43 BECAUSE OF BARK. ZREDUCED FROM 52 BECAUSE OF BARK.

TABLE 5. -- CONTINUED

PICKER	& CARD  WASTE 	PCT.		8.2 8.9 7.3		8.9 9.5		8.4 7.7 8.2		7.7 7.5 8.4		7.0 8.2 8.2		7.8
		NO.		31-4 32-2 32-2		43-2 42-1 43-2		32-1 32-2 32-1	,	31-3 31-4 32-1		31-3 31-3 31-4		22-2 21-4 21-4
COLOR OF RAW STOCK	1 9	UNITS		99.5		10.2 9.7 10.2		10.0 9.5 10.2		9.6 9.2 10.2		9.9 9.9 4.6		10.1 9.8 9.5
0 %	i	PCT.		73.0 73.0 73.0		68.0 69.7 67.2		73.0 73.0 74.0		76.3 72.3 75.0		76.0 77.0 74.0		75.0 75.3 76.2
SHIRLEY ANALYZER NONLINT	TOTA WAST	PCT.		4.7 5.4 6.0		6.4 6.3 5.7		5.2		4.7.7 5.2.6		4.0 3.8 4.9		3.8
	VISIBL	PCT.		8.8.8 87.8		4.0 4.1 3.5		3.9		3.98		2.4		23.5
1/8"	12	PCT.		4.6 5.3		6.57		5.7		5.77		000 000		6.2
ER NGTH	1/8"   GAGE	G/TEX	2 PERCENT	21 23 22	8 PERCENT	19 20 19	70 PERCENT	20 21 22	80 PERCENT	22 20 22	90 PERCENT	23 23	80 PERCENT	22 21 22
1 1	ZERO	MPS!	7	99 93	6	86 87 88	7	92 87 88	80	8 93 88	6	95 92 92	∞	87 86 82
	MICRO- NAIRE	RDG.		443 42 44		45 44 46		39 45 43		39 40 43		44 43 42		39 35
ER STH	50/2.5 UNIF.	PCT.		43 45 43		43 43 43		†† †2 ††		43 44 43		44 44 42		44 45 44
EN I	%Z		LOCKETT 77	1.00 0.98 0.99	LANKART 57	0.95 0.96 0.94	LANKART 611	0.91 0.94 0.98	LANKART 57	1.01	WESTBURN M	0.97 1.01 0.97	RILCOT 90	0.95
REA	ATION  STAPLE	32ND IN.		3333		30 30 30		30 32 31		32 31		31 31		32 32 32
PRODUCTION AREA	AND CLASSI 	NAME CODE	SOUTH WEST NORTHWEST TEXAS VERNON	SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	WOODSON	SLM SP 43 SLM SP 43 SLM SP 43	OKLAHOMA BURNS FLAT	SLM LT SP 42 M LT SP 32 SLM LT SP 42	GRANITE	M LT SP 32 M LT SP 32 SLM LT SP 42	GREENFIELD	M LT SP 32 SLM 41 SLM LT SP 42	NEW MEXICO TUCUMCARI	SLM LT SP 42 SLM LT SP 42 SLM LT SP 42

TABLE 5. -- CONTINUED

TABLE 5A.-COTTON: AMERICAN UPLAND SHORT STAPLE QUALITY CHARACTERISTICS OF YARN SPUN ON AN OPEN-END FRAME, BY PRODUCTION AREA AND CLASSIFICATION, CROP OF 1980.

PRODUCTION AREA	EA		YARN	PROPERTIES	; ; ; ; ; ; ;
AND CLASSIFICATION	NOL	STRENGTH	1 NO -	APP	NEPS
GRADE		88	88	8 S	88
	2ND IN	l l	PCT.	INDEX	. ON
CENTRAL TEXAS BYERS	LANKA	LANKART 611	06	PERCENT	
SLM LT SP 42 SLM LT SP 42 LM LT SP 52 <u>1</u> J	30 32 32	236 215 254	6.8 6.5 7.4	110 120 120	000
COMMERCE	LANKART	1RT 57	95	PERCENT	
M LT SP 32 M LT SP 32 M LT SP 32	28 29 29	214 220 23 <b>2</b>	6.2 6.4 7.3	000	000
COVINGTON	LANKA	LANKART LX571	16	PERCENT	
M 31 SLM LT SP 42 M LT SP 32	30 30 30	230 219 22 <b>2</b>	6.59 6.59	-120 110 120	0 0 0
FERRIS	TAMCOT	JT SP-37	98	PERCENT	
SLM 4.1 SLM 4.1 SLM LF SP 42	30 30	. 224 255 248	7.3	110 120 120	00 <b>0</b>
GRANDVIEW	GP 37	3774	100	PERCENT	
M LT SP 32 M LT SP 32 N LT SP 32	29 29 29	216 2 <b>23</b> 234	6.4 7.3 7.4	120 120 130	400
HOLLAND	LANKART	RT 57	75	PERCENT	
SLM 41 SLM 41 SLM SP 43	29 29 29	231 226 225	6.55	120 120 110	<b>#00</b>

JIREDUCED FROM 42 BECAUSE OF GRASS

TABLE 5A. - CONTINUED

	NEPS	88	NO.		0.00		000		0 7 8		200		800	
YARN PROPERTIES	APPEARANCE	88	INDEX	90 PERCENT	120 110 120	70 PERCENT	110 120 110	70 PERCENT	120 120 110	80 PERCENT	120 110 120	80 PERCENT	110 110	
YARN	ELONGATION	88	PCT.	Õ	5.7 6.3 6.7	1	7.2	7	7.1 8.0 7.1	8	7.3 8.1 7.2	8	6.6	
	STRENGTH	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	I. LBS.	LANKART LX571	226 226 231	3SA 71	252 256 269	TAMCOT SP-37H	245 246 260	QUAPAW	268 272 264	LANKART LX571	230 231 245	OF BARK. OF BARK.
Ą	NOI	STAPLE	32ND IN	_	29 29 29	Ü	30 31 32		31 32 32	O	32 32 33		32 32 32	BECAUSE C BECAUSE
PRODUCTION AREA	AND CLASSIFICATION	99		GENTRAL TEXAS TEMPLE	SLM 41 SLM 41 SLM LT SP 42	NORTHWEST TEXAS ABERNATHY	SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	BIG SPRING	SLM LT SP 43 LM LT SP 52 1J LM SP 53 2J	BOVINA	SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	BURKBURNETT	SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	1/REDUCED FROM 42 BE

TABLE 5A. - CONTINUED

	NEPS	)   	NO.		0 1 <u>1</u>		000		000		50 00 00 00		<b>‡00</b>	·
YARN PROPERTIES	APPEARANCE	8 × ×	INDEX	PERCENT	110 110	70 PERCENT	120 110 120	PERCENT	110 120 110	90 PERCENT	0110011	75 PERCENT	110 120 120	
YARN PE	ELONCATION	888	PCT.	06	$\frac{7.0}{\frac{1}{6.9}}$	70	7.0 7.4 7.7	06	7.2 6.7 6.3	06	7.0 8.3 8.1 1.0	75	7.0 6.8 6.9	
1	STRENCTH	88	LBS.	LANKART 611	$\frac{226}{1}$ $235$	OT SP-37	245 245 245	LANKART 57	230 231 230	PAYMASTER 202	260 268 244 267	TAMCOT SP-21	237 245 255	ARK. ARK.
EA	NOIT	STAPLE	32ND IN.	LANK	31 31 31	TAMCOT	32 32 32	LANK	188 118	PAYM	32133	TAMC	322	LINT FOR TEST. 43 BECAUSE OF BARK. 33 BECAUSE OF BARK.
PRODUCTION AREA	AND CLASSIFICATION	CRADE :	NAME CODE	NORTHWEST TEXAS CHALK	SLM 41 SLM LT SP 42 SLM LT SP 42	COLORADO CITY	LM SP 53 21 LM SP 53 21 LM SP 53 21	CROWELL .	SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	DIMMITT	SLM SP 43 SLM LT SP 42 SLM LT SP 42 SLM SP 42 SLM SP 43	NOSGOG	SLM LT SP 42 SLM LT SP 42 SLM SP 43	1/INSUFFICIENT LINT 2/REDUCED FROM 43 B 3/REDUCED FROM 33 B

TABLE 5A. - CONTINUED

PRODUCTION AREA	REA		1	YARN PROPERTIES	1
AND CLASSIFICATION	ATION	STRENGTH	ELONGATION	APPEARANCE	NEPS
GRADE	STAPLE	88	1 & 1 1 1 1	88	
NAME CODE	32ND IN.	LBS.	PCT.	INDEX	NO.
NORTHWEST TEXAS EARTH	GSA 71	17	3	85 PERCENT	
LM LT SP 52 SLM LT SP 42 SLM LT SP 42	32 32 32	266 269 265	7.9 8.1 8.0	110 110 120	000
FLOYDADA	STRI	STRIPPER 31		75 PERCENT	
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	31 30 30	261 247 229	7.4 7.3 6.4	110 110 120	0 0 0
HALE CENTER	GSA	7.1	3	85 PERCENT	
LM 51 SLM 41 SLM LT SP 42	322	262 261 258	8.0 8.3	110 110 90	888
HAMLIN	LANK	LANKART 611	8	85 PERCENT	
SLM SP 43 SLM SP 43 SLM SP 43	 	228 224 235	7.0	110	000
LEVELLAND	GSA	7.1		75 PERCENT	
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	322	242 264 269	7.2	110	000
NEW DEAL	STRIPPER	PPER 32		90 PERCENT	
SLM LT SP 42 SLM 41 SLM LT SP 42 LM LT SP 52 JJ	3838 3838 3838	271 266 282 260	7.0 7.9 8.0 7.5	110 110 120 110	0000
JREDUCED FROM 42 B	BECAUSE OF BARK.	ARK.			

TABLE 5A. - CONTINUED

PRODUCTION AREA	A:			YARN PROPERTIES	
AND CLASSIFICATION	NOI	STRENGTH	ELONGATION	APPEARANCE	NEPS
GRADE	STAPLE	8 8 8	&   	88	888
CODE	iz		PCT.	INDEX	, ON
NORTHWEST TEXAS RHINELAND	LANK	LANKART 611	)/	70 PERCENT	
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	29 31	229 241 246	6.8 7.8 7.8	110 110	009
SILVERTON	GSA 71	7.1	80	) PERCENT	
SLM 41 SLM LT SP 42	3328	262 251 261	7.8 8.1 7.6	110 120 110	000
SNYDER	WESTERN	ERN SP-44	85	5 PERCENT	
LM SP 53 11 LM SP 53 11 LM SP 53 11	322 322	247 257 241	7.3	110	0 10 0
SPUR	LANKART	ART 611	0.2	) PERCENT	
SLM LT SP 42 SLM SP 43 SLM SP 43 SLM SP 43	32 32 31	258 246 242 238	7.0 7.0 8.5 8.5	120 110 110	000#
ТАНОКА	GSA 71	7.1	) [	70 PERCENT	
LM LT SP 52 SLM LT SP 42 SLM LT SP 42	30 32 30	245 252 253	6.9 7.2 7.8	110 110	0 8 0
TOKIO	GSA 71	7.1	80	) PERCENT	
LM LT SP 52 BG 82 2J	31	240 227	7.5	120 120	00

1 REDUCED FROM 43 BECAUSE OF BARK. 2 JREDUCED FROM 52 BECAUSE OF BARK.

TABLE 5A. - CONTINUED

TABLE 6.--COTTON: AMERICAN UPLAND MEDIUM STAPLE FIBER AND YARN QUALITY CHARACTERISTICS BY PRODUCTION AREA AND CLASSIFICATION, CROP OF 1980.

MICRO-	0 P		1980.											1
100 PERCENT  10 PERCENT  10 PERCENT  10 PERCENT  10 PERCENT  11			_ []					1/8"		LYZER		AW AW		  PICKER
POT. RDG. MPSI G/TEX PCT. PCT. PCT. PCT. UNITS NO. PCT.  143		2.5% SPAN		50/2. UNIF	NAIRE	ZERO	1/8" GAGE	GATION	VISIBLE WASTE	TOTAL WASTE	Rd	q+	: COLOR : CODE	I WASTE
#3       #0       91       22       5.7       2.0       3.1       73.7       9.7       32-2       6.3         #3       #2       93       PERCENT       22       5.6       2.0       3.0       74.4       9.7       32-2       6.3         #3       #2       89       22       6.6       1.7       2.0       74.4       9.2       31-4       7.3-7         #3       #6       88       23       6.6       1.7       2.6       74.0       9.4       31-4       7.0         #4       #5       84       23       6.6       1.7       2.6       74.0       9.4       31-4       7.0         #4       #5       88       23       6.6       1.7       2.8       74.1       9.4       31-4       7.0         #4       #5       89       22       6.2       1.7       2.8       68.9       74.4       10.4       31-4       7.0         #4       #6       89       22       6.2       1.8       2.3       74.4       10.4       31-4       7.0         #4       #6       89       22       6.2       1.8       2.8       76.3       76.3	32ND IN. IN.	Z   - 		1 .	RDG	MPSI	G/TEX	i •	L C	PCT.	PCT.	-   -   Z	I ON	PCT.
H3         40         91         22         5.7         2.0         3.1         73.7         9.7         32-2         6.7           H3         H2         99         22         5.6         2.0         3.0         70.0         9.1         42-2         6.7           H3         H2         89         22         6.6         1.7         2.6         74.0         9.1         42-2         6.7           H3         H6         88         23         6.6         1.7         2.6         74.0         9.4         31-4         6.1           H3         H6         88         23         6.6         1.7         2.6         74.0         9.4         7.0           H3         H6         88         23         6.6         1.7         2.6         74.0         9.1         7.3           H1         H6         91         23         6.6         1.7         2.2         74.0         9.4         4.1-3         6.9           H2         H6         89         22         6.2         1.7         2.8         76.1         9.4         41-3         7.0           H3         H6         90         23         5.	DELTAPINE			55		7								
45       50       87       23       6.66       1.7       2.6       74.1       9.4       31-4       6.1         43       46       88       23       6.6       1.5       2.0       74.1       9.4       31-4       6.1         43       46       88       23       6.6       1.5       2.0       74.1       9.4       31-4       6.0         13       75       84       23       6.6       1.8       2.9       74.1       9.4       31-4       6.9         41       45       91       22       6.0       2.1       3.3       72.7       9.4       31-4       6.9         42       46       89       22       6.0       1.7       2.8       68.3       9.4       42-2       7.0         44       46       89       22       6.0       1.8       2.3       74.4       10.4       31-3       7.6         44       46       90       22       5.4       2.8       3.4       70.1       8.3       31-4       7.0         44       46       90       22       5.4       2.8       3.4       70.1       70.1       8.8       31-4       <	35 1.08 34 1.06 34 1.04	1.08 1.06 1.04		43 42 42	40 42 45	91 89	22 22 22		000		3.	9.7	32-2 42-2 31-4	w 1- w
\$ \text{4.6} & \text{88} & \text{2.3} & \text{6.6} & \text{1.7} & \text{2.6} & \text{74.0} & \text{9.4} & \text{31-4} & \text{7.0} \\ \$ \text{4.6} & \text{88} & \text{2.3} & \text{6.6} & \text{1.5} & \text{2.9} & \text{75.0} & \text{8.2} & \text{41-3} & \text{6.9} \\ \$ \text{4.6} & \text{89} & \text{2.2} & \text{6.2} & \text{1.7} & \text{2.8} & \text{68.3} & \text{9.4} & \text{41-4} & \text{6.9} \\ \$ \text{4.6} & \text{90} & \text{2.2} & \text{6.0} & \text{2.1} & \text{2.8} & \text{68.3} & \text{9.4} & \text{42-2} & \text{7.0} \\ \$ \text{4.6} & \text{90} & \text{2.2} & \text{6.0} & \text{2.1} & \text{2.8} & \text{68.3} & \text{9.4} & \text{42-2} & \text{7.0} \\ \$ \text{4.6} & \text{90} & \text{2.2} & \text{5.4} & \text{2.8} & \text{3.4} & \text{70.1} & \text{8.3} & \text{41-4} \\ \$ \text{4.6} & \text{90} & \text{2.2} & \text{5.4} & \text{2.8} & \text{3.4} & \text{70.1} & \text{8.3} & \text{41-4} \\ \$ \text{4.9} & \text{91} & \text{2.1} & \text{6.1} & \text{1.8} & \text{2.6} & \text{68.0} & \text{10.04} & \text{43-2} & \text{7.0} \\ \$ \text{4.9} & \text{91} & \text{2.6} & \text{68.0} & \text{10.10} & \text{43-1} & \text{5.0} \\ \$ \text{4.9} & \text{92} & \text{24} & \text{6.2} & \text{2.1} & \text{4.1} & \text{2.5} & \text{74.0} & \text{8.8} & \text{32-1} & \text{6.6.} \\ \$ \text{5.0} & \text{98} & \text{24} & \text{6.2} & \text{2.1} & \text{4.9} & \text{2.6} & \text{68.0} & \text{10.04} & \text{43-2} & \text{5.0} \\ \$ \text{4.7} & \text{9.3} & \text{24} & \text{5.7} & \text{4.1} & \text{10.1} & \text{43-1} & \text{5.0} \\ \$ \text{5.0} & \text{98} & \text{24} & \text{5.7} & \text{4.1} & \text{5.5} & \text{5.0} & \text{8.8} & \text{32-1} & \text{6.6.} \\ \$ \text{5.0} & \text{9.8} & \text{2.1} & \text{6.0} & \text{3.0} & \text{5.6} & \text{68.0} & \text{10.04} & \text{43-1} & \text{5.0} \\ \$ \text{5.0} & \text{9.8} & \text{2.1} & \text{6.0} & \text{5.1} & \text{6.0} \\ \$ \text{5.0} & \text{5.0} \\ \$ \text{5.0} & \text{5.0} & \text{5.0} &	DELTAPINE 61					O	3 P							
75 PERCENT  1 445 91 23 6.0 2.1 3.3 72.7 9.4 31-4 6.9  1 441 88 22 6.2 1.7 2.8 68.3 9.4 42-2 7.0  1 441 89 22 6.0 1.8 2.3 74.4 10.4 42-2 7.0  2 44 45 90 23 5.4 2.8 3.4 70.1 8.3 11-2 7.0  1 45 89 22 5.4 2.8 3.4 70.1 8.3 11-4 7.0  1 46 90 22 5.4 2.8 3.4 70.1 8.3 11-4 7.0  1 49 91 24 6.1 1.8 2.6 68.4 10.2 43-1 5.7  1 49 91 24 6.2 2.1 3.3 68.0 10.4 43-2 7.1  2 50 98 24 5.6 3.0 3.6 68.2 10.4 43-1 7.5  4 47 93 24 5.6 3.0 3.6 68.2 10.4 43-1 8.6  5 50 98 24 5.7 41.1 5.2 77.4 10.1 32-2 7.0	35 1.10 35 1.07 34 1.05	1.10		45 43 43	50 46 45	88 84 84				25.0	44.		31-4 31-4 41-3	
4 b b b b b b b b b b b b b b b b b b b	STONEVILLE 21			3		1	5 P							
95 PERCENT  100 PE	35 1.10 34 1.06 34 1.05			44 41 42	45 41 46	91 88 89	23 22 22		2.1	  	485	9.4 9.4 10.4	31-4 42-2 31-3	
44         90         23         5.4         2.5         3.5         76.3         8.3         31-2         6.7           46         90         22         5.4         2.8         3.4         70.1         8.3         41-4         7.0           45         85         23         6.5         1.5         2.4         75.0         8.8         31-4         7.0           49         91         24         6.1         1.8         2.6         68.4         10.2         43-1         7.1           49         91         24         6.2         2.1         3.3         68.0         10.4         43-2         7.1           49         91         23         6.2         1.4         2.5         74.0         8.8         32-1         6.6           49         91         23         6.2         1.4         2.5         74.0         8.8         32-1         6.6           49         92         24         5.6         3.0         3.6         68.2         71.4         43-1         7.5           50         98         24         5.7         4.1         5.2         71.4         9.5         42-1         8.6-1 <td>LE</td> <td></td> <td></td> <td>10</td> <td></td> <td>01</td> <td>5 P</td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td>	LE			10		01	5 P			•				
100 PERCENT  49 91 24 6.1 1.8 2.6 68.4 10.2 43-1 5.7  49 95 24 6.2 2.1 3.3 68.0 10.4 43-2 7.1  49 95 24 6.2 1.4 2.5 74.0 8.8 32-1 6.6-  100 PERCENT  50 98 24 5.6 3.0 3.6 68.2 10.4 43-1 7.5  47 93 24 5.7 4.1 5.2 71.4 10.1 32-2 7.0-  49 90 24 6.1 3.7 4.9 73.4 9.9.5 42-1 8.6-	35 1.11 35 1.11 35 1.07		~ ~ ~	+3 +4 +2	44 46 45	90 90 <b>85</b>	23 23 23				50.		31-2 41-4 31-4	~ 0 · 0
μg         91         24         6.1         1.8         2.6         68.4         10.2         μ3-1         5.7           μg         95         24         6.2         2.1         3.3         68.0         10.4         μ3-2         7.1           μg         91         23         6.2         1.4         2.5         74.0         8.8         32-1         6.6           100         PERCENT         3.0         3.6         68.2         10.4         μ3-1         7.5           50         98         24         5.7         μ.1         5.2         71.4         10.1         32-2         7.0-           μg         90         24         6.1         3.7         μ.9         73.4         9.5         μ2-1         8.6-	COKER 304	COKER 304				10								
100 PERCENT 50 98 24 5.6 3.0 3.6 68.2 10.4 43-1 7.5 47 93 24 5.7 4.1 5.2 71.4 10.1 32-2 7.0- 49 90 24 6.1 3.7 4.9 73.4 9.5 42-1 8.6-	35 1.07 34 1.08 34 1.04	1.07 1.08 1.04		44 43 42	6 tr 6 tr	91 95 91	24 24 23					000	233	-1-9
50     98     24     5.6     3.0     3.6     68.2     10.4     43-1     7.5       47     93     24     5.7     4,1     5.2     71.4     10.1     32-2     7.0-1       49     90     24     6.1     3.7     4.9     73.4     · 9.5     42-1     8.6-1	MCNAIR 220	MCNAIR 220	0			10	۵							
	34 1.06 34 1.05 34 1.06	1.06 1.05 1.06		46 46 45	50 47 49	98 93 90	24 24 24				68.2 71.4 73.4	000	22-	0.00

33.1 33.0 32.6 32.6 33.1 32.0 33.0 32.4 31.7 32.8 26.0 26.0 25.9 26.2 27.1 27.7 27.5 26.9 28.0 26.5 26.5 27.0 COLOR OF FINISHER DRAWING SLIVER PCT. 27.3 29.9 28.0 26.7 27.5 28.0 Rd 5.5 5.4 5.4 6.2 4.1 4.4 5.3 4.1 4.9 5.0 4.1 4.8 4.8 6.0 4.5 5.0 BLEACHED Rd 91.5 93.6 90.8 92.8 91.7 91.0 90.6 92.7 89.5 90.9 91.4 90.1 87.7 93.3 91.3 90.5 88.7 91.5 0.01 9.6 8.9 9.8 9.0 10.5 10.4 9.9 9.01 9.9 9.4 **q**+ GRAY 76.0 72.0 72.2 75.9 75.6 75.0 75.2 71.0 71.4 79.6 72.9 73.8 70.1 70.9 72.3 70.8 70.3 72.2 52 45 45 52 47 46 52 45 39 53 54 54 54 50 51 47 523 50s 258 100 310 424 418 392 276 596 394 144 650 356 330 162 334 NEPS PERCENT 58 52 68 70 PERCENT PERCENT PERCENT PERCENT PERCENT 118 78 90 PCT. INDEX INDEX ELONGATION | APPEARANCE 09 09 09 YARN PROPERTIES 9001 100 100 70 80 100 100 120 001 001 100 90 110 22s : 50s 5.1 4.7 4.6 4.7 4.6 4.9 50.5 50.0 50.0 4.6 4.9 4.5 4.6 4.9 4.7 5.1 4.7 4.6 PCT. 213 5.8 5.8 6.0 6.4 5.9 6.1 7.0 6.4 5.8 6.6 6.4 5.8 5.6 6.0 6.0 6.1 5.6 6.4 DELTAPINE 55 DELTAPINE 61 STONEVILLE 3103 34 29 87 30 LBS. STONEVILLE 220 35 30 30 304 STRENGTH MCNAIR COKER 22s LBS. 108 91 93 95 95 95 102 104 89 108 103 111 : STAPLE 35 35 34 34 34 AND CLASSIFICATION 35 34 34 35 34 34 GRADE : ST PRODUCTION AREA SP 42 SP 42 SP 42 52 45 45 45 45 427 SPRING GARDEN 50 51 42 41 CODE AUTAUGAVILLE SP SP SP SP SP ALICEVILLE SLM LT S FAYETTE SLM SLM LT SLM LT SLM LT SLM LT SLM LT P I EDMONT SLM LT DAKLAND ALABAMA NAME SLM SLM SLM

TABLE 6. -- CONTINUED

PRODUCTION AREA	ON AREA		FIBER LENGTH		STRE	FIBER STRENGTH	1/8"		ANALYZE INT		LOR W ST		PICKER
GRADE	STAPLE	2. S.P.	50/2.5 UNIF.	NAIRE	ZERO	1/8" GAGE	GATION	- B	0 M	Rd	q+	OR E	- I& CAKU  WASTE 
NAME CODE	DE 32ND IN.		PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
ALABAMA SULLIGENT		DELTAPINE	61		95	PERCENT					•		
SLM 41 LM 51 SLM LT SP 42	34 1 35 2 34	1.08 1.08 1.06	45 45 44	46 50 49	90 89 90	22 23	6.3 6.2	3.0	3.8 4.7 3.3	73.3 71.5 68.0	9.5	32-2 42-1 42-2	7.0 7.5 7.7
GEORGIA BOSTWICK		DIXIE KING 111	=======================================		100	PERCENT							
SLM SP 43 SLM SP 43 SLM SP 43	3 33 33 31 31	0.98 0.97 0.97	†† †† ††	41 43 44	96 92 94	22 21 21	55.0	2.0	2.9	72.0 66.9 72.0	10.6 11.3 11.0	33-2 43-2 33-1	8.3 7.5
רוררא		STONEVILLE 825	£ 825		75	PERCENT							
LM 51	51 <u>U</u> 33 51 <u>U</u> 33	0.98	46 42	52 52	93	21 24	4.7	2.6	3.8	72.8	8.9	41-3	9.4
VIENNA		COKER 304			80	PERCENT							
SLM LT SP 42 SLM LT SP 42 LM LT SP 52	3332	1.07	46 45 43	44 45 42	98 91 97	25 23 24	25.25 20.05	3.0	3.9 4.2 4.1	69.7 66.7 70.1	10.3	43-1 43-2 42-1	7.0 8.0 8.1
NORTH CAROLINA LAURINBURG	et.	MCNAIR 220	0		95	PERCENT							
LM+ 50 LM LT SP 52 LM LT SP 52	35 2 35 35 35	1.06	44 44 54	43 43 42	96 94 91	27 23 24	5.0 5.0	3.3 4.0	4.5 3.1 4.9	73.0 76.0 67.4	9.0	41-3 >2-2 51-3	7.5
1/REDUCED FROM 41 BECAUSE OF	41 BECAUSE C	OF GRASS.											

TABLE 6. -- CONTINUED

PRODUCTION AREA	! !	 	 	 	YARN	PROPERTIES	.I ES				CO	OR 0F	FINISHER	DRAWING 8	SLIVER	
AND CLASSIFICATION		STRENGTH		ELONGA		APPEARANCE		NEP	S	1 2	i	1	BLEA	CHED	DYED	ED
		22s :	508	22s :	l s	22s	50s	22s	50s l		Rd :	1			Rd	q- :
l I	32ND IN.		LB	PCT.	PCT.	INDEX	INDEX	NO.	NO.	NO.	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
ALABAMA SULLIGENT		DELTAPINE	1NE 61				95 F	PERCENT								
SLM 41 51 3 SLM LT SP 42 3	34 35 34	104 103 86	35 28 28	5.6	5.5	1100	80 70 60	64 84 50	430 290 184	53 36	77.3	9.8 9.7 10.01	91.4 91.7 90.3	4.3 4.7 4.9	26.9 26.3 27.5	33.1
GEORG1A BOSTW1CK		DIXIE	KING III	_			100 F	PERCENT								
SLM LT SP 42 SLM SP 43 SLM SP 43	33 32 31	86 79 83	26 <u>11</u> 25 <u>31</u> 26	50.00	4.7 4.9 4.7	100	60 80 70	50 68 60	86 214 314	25 <u>21</u> 25 <u>21</u> 32	72.7 68.6 83.2	10.8	90.0 87.0 87.7	7.59	27.6 28.0 27.0	31.8 30.7 31.6
LILLY		STONEVILLE	/ILLE 825	5			75 F	PERCENT								
LM 51 14 3	333	65	19 <u>3</u> 26 <u>3</u> ]	4.5	4.9	90	09	76 108	270 274	25 <u>21</u> 25 <u>21</u>	75.8	9.1	91.4	4.4	26.3	33.2
VIENNA		COKER	304				80 F	PERCENT								
SLM LT SP 42 SLM LT SP 42 LM LT SP 52	333	100 100 95	32 32 32	5.4	4.0 4.7 4.7	80 90 90	70 60 60	106 94 88	436 444 282	47 52 47	72.6 70.7 69.9	10.7 10.6 10.0	88.7 91.8 88.8	5.6	25.4 27.6 28.3	33.4 32.4 31.7
NORTH CAROLINA LAURINBURG		MCNAIR	220				95 F	PERCENT								
LM LT SP 52 3 LM LT SP 52 3	35 34 35	119 101 109	41 33 37	9.9 4.9 6.0	5.4 4.9 4.6	100 80 80	70 60 70	72 64 104	288 338 456	60 47 65	76.8 68.6 83.3	9.5	91.9	45.5	26.9 28.5 28.8	32.8
TEND BREAKAGE TOO HIGH TO SPIN 50s YARN.	HIGH I	O SPIN 50	S YARN.	44s YARN		SPUN AND	STRFNG	SIRENGIH ADJUSTED	STED TO	THE	FOULTVALENT	0F 50c				

THIS IS AN ESTIMATED VALUE BELOW THE RANGE OF THE TEST.

2/1THIS IS AN ESTIMATED VALUE BELOW THE RANGE OF THE TEST.

3/2 END BREAKAGE TOO HIGH TO SPIN 50s YARN. 36s YARN SPUN AND STRENGTH ADJUSTED TO THE EQUIVALENT OF 50s.

4/2 PREDUCED FROM 41 BECAUSE OF GRASS.

TABLE 6. -- CONTINUED

STH S: MICRO NAIRE ZERO-	1 2 1	F1BER LENGTH
46E 2SI	RDG.	PCT. RDG.
100	10	COKER 315 10
388	41 9 46 8 45 8	5 8 8 8
100	100	DELTAPINE 61 100
);t )33	49 94 45 93 46 92	020
90	36	STONEVILLE 213 90
96 716 96	45 96 84 94 96	
90	06	STONEVILLE 213 90
228	48 50 9 48 8	998
100	100	STONEVILLE 213 100
8098	50 8 49 9 47 8	80.8
90	06	DELTAPINE 55 90
35	43 48 88 84 9	33 88 89 89
		LICOTTON STUCK TO PROCESSING ROLLS.

		q-	UNITS	32.9 32.8 31.9		33.6 32.9 32.6		32.7 31.8 32.3		33.1 33.6 32.6		33.7 32.9		32.9 32.1 31.9
SLIVER	1		PCT.	27.2 27.1 28.9		26.1 27.0 27.5		27.5 28.3 26.9		26.1 25.8 27.1		26.2 26.2 26.7		27.2 28.3 27.8
NISHER DRAWING	HED	q+	UNITS	4.5 4.6		5.7 4.2		5.7		5.1		4.0 3.6 6.1		4.6 5.1
INISHER	BLEACHED	1 70	PCT.	91.4 89.8 91.1		89.5 90.0 90.1		91.4 90.2 89.9		90.3 91.4 88.7		90.1 93.2 90.1		91.6 92.6 89.9
COLOR OF F	   	٩	UNITS	9.5 9.3		9.08 9.08		10.0 9.9 9.4		9.9 9.9 8.3		9.0		9.3
00	GRAY	Rd :	PCT.	77.8 69.0 67.9		71.9		75.1 68.1 67.8		77.7 70.1 84.2		71.1 74.1 87.0		80.5 77.3 85.0
	2 2	NO.	NO.	61 63		42 56 56		42 40 39		49 46 50		53 50 54		56 52 52
		50s	. ON	552 480 328		590 326 426		598 240 272		304 482 314		140 264 356		280 124 440
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	NEPS	S	NO.	PERCENT 94 80 60	PERCENT	106 62 84	PERCENT	86 128 96	PERCENT	74 96 56	PERCENT	44 38 74	PERCENT	8 7 7 7 7 8
TES	PPEARANCE	50s	INDEX	100 F 60 60 60	1001	09 70 60	90	60 70 70	90	80 60 70	100	80 70 70	1 06	70 60 60
PROPERTIE	APPEAR	1	X	100 90 90		90 80 80 80		90 06 06		90 100 110		1100		100 90 90
YARN	ATION		1 🗠	5.4 4.3		5.3		3.52		4.9 4.7 4.8		4.8 4.6 4.3		5.55 4.50 4.50
	ELONGAT	22s	<u> </u>	7.0 5.5 5.4 4.4		6.3	/ILLE 213	5.9	VILLE 213	5.9 6.3 6.4	213	6.4 5.8 5.4		6.3
	GTH	50s	LBS.	315 40 38 36	DELTAPINE 61	35 37		29 25 25		34 32 31		33 30 34	1NE 55	338
	STREN	22s :		COKER 114 107 108	DELTA	105 103 106	STONEVILLE	94 88 82	STONEVILLE	102 97 98	STONEVILLE	102 96 100	DELTAPINE	112
Y3	NOI	STAPLE	32ND IN.	34 35 34		35 35 35		35 34 34		35 34 34		35 35 35		34 35 35
PRODUCTION AREA	AND CLASSIFICATION	••	CODE	ROLINA HEWS 41 41 51	ER	SP 42 SP 42 SP 42		41 SP 52 SP 52		41 SP 52 SP 42		15 14 11		41 51 SP 42
PRODUC	AND CL/	GRA	NAME	SOUTH CAROLINA ST MATTHEWS SLM 41 SLM 41	ARKANSAS ALTHEIMER	SLM LT SLM LT SLM LT	ВАУ	SLM LM LT LM LT	DELL	SLM LM LT SLM LT	DUMAS	SLM	EUDORA	SLM LM SLM LT

TABLE 6. -- CONTINUED

    PICKER	& CARD  WASTE	_ ;	PCT.		6.9		6.5 8.3		888 9.05.		7.5		7.3 <u>1</u> ) 7.3 6.4		5.4 7.1 6.7 <u>U</u>	
	COLOR	CODE	NO.		41-3 41-4		42-2 31-4 51-3		42-2 53-1 52-1		41-3 52-1 51-3		31-4 32-1 41-4		21-2 31-2 31-1 41-3	
OLO AW	-	Q+ -	UNITS		7.8		9.4		9.4		9.2		9.2 9.9 8.7		. 8.8 . 7.8 . 8.0	
		. Hd	CT		69.2		67.3 73.2 66.4		69.5 63.5 66.3		72.7 68.0 69.0		75.4 75.0 70.0		79.0 77.2 79.3 73.0	
NALYZER I	TOTAL	WASIE			3.5		3.0		4.7 4.0 3.9		3.3		23.5		3.9	
SHIRLEY NON	VISIBLE:	WASIE	PCT.		2.2		2.4 4.8 4.3		3.6		2.3		1.8 1.5		0.0	
!	CATION	-			5.4		50.00 30.00		4.7 4.4 4.6		5.00 5.00 5.00		5.7		6.8 7.0 7.6 5.7	
ER NGTH	1/8"	GAGE	G/TEX	PERCENT	23 24	PERCENT	24 26 25	PERCENT	22 22 20	PERCENT	23 24 22	PERCENT	23 23	PERCENT	255 255 26	
	ZERO	GAGE	MPSI	80	91	100	93 97 96	100	97 95 93	06	95 89 90	75	98 86	06	488 888 986 86	
	MICRO-	- 1 1 1 1 1 1 1	RDG.		45 46		9th 2th 2th		50 49 47		47 48 47		49 51 45		51 48 44	
ļ -	50/2.5	UNIT.	PCT.	41	, ††† †††		44 44 44		42 41 41	825	43 42 41	16	43 45 45	61	†† †† ††	
F   F	2.5%	SPAN	ż –	DELTAPINE	1.11	MCNAIR 235	1.09	VAIL 7	1.11	STONEVILLE	1.12	DELTAPINE	1.06 1.08 1.05	DELTAPINE	1.11	ROLLS.
EA	AT I ON	SIAPLE	32ND	0	36 35	2	34 35 34	>	35 34 34	S	35 35 34	0	35 35 34	۵	35 34 34 34	MCOTTON STUCK TO PROCESSING ROLLS
PRODUCTION AREA	SSIFIC	DE :	CODE	LAGE	51 SP 42	LE	SP 52 SP 52 SP 52	LE	SP 42 SP 52 SP 52	REE	41 61 51	LL.	SP 42 41 SP 42	VIDENCE	31 41 41 SP 42	TUCK TO P
PROD	AND CLA	GRADE	NAME	ARKANSAS LAKE VILLAGE	LM SLM LT	LEACHVILLE	LM LM LT LT	LEACHVILLE	SLM LT LM LT	MARKED TRE	SLM SGO LM	PINE BLUFF	SLM LT SLM SLM LT	LOUISIANA LAKE PROVIDENCE	SLM SLM SLM	1cotton 's

TABLE 6. -- CONTINUED

	ED		UNITS		32.3		30.9 32.3 32.4		34.7 32.7 32.6		33.0 32.3 32.7		33.0 32.6 32.6		33.7 33.7 32.7 32.2	
SLIVER	λα Ο	- p	PCT.		27.9		29.2 27.0 27.3		24.1 27.0 27.6		26.5 27.7 26.7		27.1 25.7 27.3		26.2 26.6 27.3 27.3	
DRAWING	0.3	<del>  +</del>	UNITS		4.7 7.4		5.1 4.5		4 t . 5 . 3 8 . 3		4.5		4.8 5.0		4.4 4.7 4.7	
INISHER	BLEA	Rd	PCT.		91.2		89.6 89.3 90.5		90.2 88.9 88.7		89.3 90.2 89.2		91.4 92.6 90.6		91.9 93.5 91.1	
LOR OF		q+	UNITS		8.5		10.2 10.0 9.5		9.8 10.0 9.2		9.6 8.7 8.6		9.7		8.7 8.7 9.8	OF 50s.
	5	Rdi	PCT.		71.7		69.5 71.3 70.7		73.0 66.8 69.0		76.7 67.2 70.2		72.3 77.3 71.3		80.1 77.1 77.0 73.7	EQUIVALENT
		70	. ON		57		49 61 55		52 31 37		42 43 43		47 45 37		52 52 65	THE
İ	S	50	!		118		228 336 216		410 408 410		414 440 420		330 168 460		704 392 408 378	ADJUSTED TO
1		2 s	i I •	PERCENT	32 28	PERCENT	66 92 76	PERCENT	132 138 116	PERCENT	106 124 80	PERCENT	66 60 36	PERCENT	116 82 82 96	
1 3	RANCE	508	QN	80	09	100	02 70 70	100	02 02 09	90	09	75	02 70 70	90	09 09 09	STRENGTH
PROPERT	APPEARANC	22s	INDEX		110		80 90 110		110 90 100		90 80 80		100 110 90		100 90 70 80	PUN AND
		: 508			4.7		4.6 4.7 4.2		4.4		4.4 4.4 4.5		4.9 4.5 3.7		5.5 6.13 4.9	YARN SP
	ELONGAT		PCT.		6.4		5.0		6.0 4.9 4.2	25	5.5		5.7		6.7 6.5 7.2 6.0	. 44s
1		508	l	DELTAPINE 41	36 37	R 235	33 34 35	7	33 23 1 26	STONEVILLE 82	30 27 26	PINE 16	32 31 27	PINE 61	36 35 40 38	50s YARN
1	STRENGTH		LBS	DELTA	108	MCNAIR	98 104 106	VAIL	102 78 78	STONE	93 88 85	DELTAPINE	97 100 89	DELTAPINE	105 106 114 113	SPIN
			-		36 35		34 35 34		35 34 34		35 35 34		35 35 34		35 35 37 37	нісн то
PRODUCTION AREA	AND CLASSIFICATION	GRADE	AME CODE	ARKANSAS LAKE VILLAGE	LM 51 SLM LT SP 42	LEACHVILLE	LM LT SP 52 LM LT SP 52 LM LT SP 52	LEACHVILLE	SLM LT SP 42 LM LT SP 52 LM LT SP 52	MARKED TREE	SCM 41 SGO 61 LM 51	PINE BLUFF	SLM LT SP 42 SLM 41 SLM LT SP 42	LOUISIANA LAKE PROVIDENCE	SLM 31 SLM 41 SLM LT SP 42	END BREAKAGE TOO
	<	1	l	ARK	S	LE		LE	S	MA	w w	Ы	os os os	LOU	S S S	1) EN

I P I CKER	& CARD	PCT.		5.9 6.9 7.5		5.1 6.6 6.1		88.8		5.6 6.6		7.1		5.9 7.0 6.0
	COLOR	NO.		21-2 31-2 21-2 41-3		41-3 41-3 31-2 52-1		41-3 31-4 31-2 41-4		31-3 31-4 41-3		31-4 51-3 52-1		21-2 41-3 51-3
COLOR OF RAW STOCK	4	UNITS		8.6 7.4 9.2 9.0		8.6 7.8 8.5		8888 4.5 5.5 7.5		888 625		8.8		8.7 9.3 8.2
0 %	Rd	PCT.		79.3 77.4 80.0 72.0		72.5 73.5 76.2 68.4		73.5 75.0 77.0		76.3 76.0 74.0		74.5 67.0 68.0		78.5 72.1 70.0
.NALYZER NT	TOTAL	PCT.		3.28		22.03		80000 0000		1.4 1.8 2.6		4.7 3.6 2.9		00.8
SHIRLEY ANALYZER NONLINT	VISIBLE :	PCT.		1.5		1.333		22.00		0.9		3.7 2.2 4.0		1.7 1.0 1.9
1/8"	ELON- GATION	PCT.		5555 - 4550		5555 5055 4		55.55 5.55 5.55 5.55 5.55 5.55 5.55 5.				5.5		7.0 6.8 6.6
FIBER STRENGTH	1/8"   GAGE	G/1EX	PERCENT	22 24 23 23	PERCENT	24 24 23 21	PERCENT	22 24 22 22	PERCENT	24 24 24	PERCENT	24 24 23	PERCENT	25 23 22
FIB	ZERO :	MPSI	100	94 95 96	100	93 92 94 91	85	97 98 88	100	95 86 91	100	99 98 96	100	90 88 86
	MICRO- NAIRE	RDG.		46 48 48 45		44 44 43		49 52 50 50		49 48 45		7 7 7 7 7 7		51 44 42
ER –	50/2.5 UNIF.	PCT.	825	44 43 43 43 43	55	45 45 45 45 45 45	213	1 1 1 2 1 1 1 1 1 1 1 1 1 1 1		77 77 77 77 77	41	11 11 11	61	44 42 41
FIBER	2.5% :	. N .	STONEVILLE	1.06	DELTAPINE	1.11 1.08 1.05	STONEVILLE	1.08 1.06 1.05	DES 56	1.07	DELTAPINE	11.10	DELTAPINE	1.12
EA	TION	32ND IN.	W)	35 35 35 4		34 35 34 34	0)	48 32 32 32 48		35 35 36	J	35 35 35		35 34 34
PRODUCTION AREA	ND CLASSIFICATION	ODE	)VIDENCE	41 41 41 SP 52	ìE	41 41 41 SP 42	SLAND	1 1 1 1 1 1 1	140	GR 26 31 41		50 51 SP 52	.LE	31 GR 36 51
PROD	AND C	NAME	LOUISIANA LAKE PROVIDENCE	SLM SLM SLM LM	OAK RIDGE	SLM SLM SLM SLM	SICILY ISLAND	S S C K S C	MISSISSIPP ARCOLA	SM LT M SLM	DUNCAN	LM LM LM	GREENVILLE	M M LT. GR LM

TABLE 6. -- CONTINUED

PRODUCTION AREA		1 1 1 1 1 1	 	 	YAR	 0PE	1 H	1		i	00	1 ~	INISHE	RAWING	SLIVER	
ND CLASSIFICA		STRENGT		ELONG	I O	APPEA	NCE	NEP NEP	S		5		BLEA	HED	λO	
GRADE :	1	2s :	50s	22s	ונ	22s	so	i N	508				- X	q+	Rd	
NAME CODE 32P	ZND IN.	LBS.	LBS.	PCT.	PCT.	INDEX	INDEX	. ON		. ON	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
LOUISIANA LAKE PROVIDENCE		STONEVILLE	LLE 825	55			100 P	PERCENT								
SLM 41 SLM 41 SLM 41 LM LT SP 52	32 32 32 32 32	91 100 94 104	30 32 35 35	7.7.7.7. 7.8.7.8	444 7.5.5.	90 90 80 70	09	108 104 84 196	320 578 426 486	40 51 58 58	78.3 77.9 78.4 73.3	9.1 8.5 12.8 9.7	90.9 92.2 91.5	# - # # # # # # # # # # # # # # # # # #	26.8 25.8 26.7 27.5	32.7 33.9 32.8 32.9
OAK RIDGE		DELTAPINE	NE 55				100 F	PERCENT								
SLM 41 SLM 41 SLM LT SP 42	34 35 34 34	98 97 85	33 33 28 26	0.000	4.7 5.4 4.1	100 100 90 100	09 09 70 60	54 44 30	296 570 268 196	53 48 37 35	74.2 76.1 75.4 69.6	8888.7 98.89.7 9.59.89	89.9 91.1 91.6 90.4	3.7 4.3 4.8	26.1 26.9 28.6 27.2	333.2 32.0 32.0
SICILY ISLAND		STONEVILLE	LLE 21	13			85 P	PERCENT								
SLM SLM 41 SLM 41	34 35 34 34	102 96 90 98	32833	50.00	4 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	110 110 110	60 80 80 70	56 48 42 42	252 174 234 254	50 23 25 25	74.2 76.6 74.7 74.3	88.9 8.9 9.2 9.2	93.4 88.1 90.8 91.2	4004 -000	24.0 25.7 27.4 25.9	35.0 33.6 32.4 33.2
MISSISSIPPI ARCOLA		DES 56					100 F	PERCENT								
SM LT GR 26 M 31 SLM 41	35	102 111 117	32 42	6.1 6.2 5.6	4.8 4.7 4.8	120 100 110	70 80 70	34 28 40	162 148 178	51 55 57	73.7 87.1 74.3	999	91.1 90.9 91.7	8.4 4.3	26.9 25.5 28.2	33.2 33.7 32.3
DUNCAN		DELTAPINE	NE 41				100 F	PERCENT								
LM+ 50 LM 51 LM LT SP 52	335	116 99 106	39 34 37	5.5	7.7 7.7 7.7	06 06 06	02 09 70	91 94 04	356 448 236	57 54 67	76.8 69.9 83.2	9.3	92.6 92.2 90.5	3.4	29.6 27.0 27.3	31.5 33.1 32.9
GREENVILLE		DELTAPINE	NE 61				100 P	PERCENT								
M 17 GR 36 LM LT GR 36	35 34 34	116 93 106	37 25 36	7.1 6.4 6.1	5.3	100 110 80	70 70 60	32 50 32	262 384 348	57 41 56	78.4 71.7 85.3	9.1	93.9 90.7 90.4	3.8 4.4 4.9	26.5 26.4 27.9	33.3 33.3 32.1
1 END BREAKAGE TOO	нісн	TO SPIN 50s	YARN.	368	YARN SP	PUN AND	STRENGTH	TH ADJUSTED	STED TO	THE EQ	EQUIVALENT	OF 50s.				

TABLE 6. -- CONTINUED

PRODL	PRODUCTION AREA	AREA		FIBER LENGTH		FIB	FIBER STRENGTH	1/8"	SHIRLEY ANA	SHIRLEY ANALYZER NONLINT		COLOR OF RAW STOCK	×	PICKER
AND CL	ASSIF1	AND CLASSIFICATION	10 C C		MICRO-	7600	1 / 10 11	ELON		1 - 4 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6	1		-1	& CARD
		STAPLE	SPAN	UNIF.		GAGE	GAGE	101 100	ST	AS	Rd	q	000	WAS I E
NAME	CODE	32ND IN		PCT.	RDG.		G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
MISSISSIPP GREENWOOD	<u>-</u>		STONEVILLE 825	_E 825		100	PERCENT							
EZE	17.00	332 322	1.08 1.08 1.07	42 43 45	7 6 th	93 94 87	22 21 22	4.9 4.7 5.6	3.19	3.6 3.8 4.7	70.2 69.0 70.0	8.6 7.4 8.2	41-4 51-3 51-3	7.6
HOLLANDALE	F		STONEVILLE	LE 825		100	PERCENT							
EEE	12.52	335 355	1.12	44 43 43	50 48 46	94 93 86	22 23 23	4.7 4.8 5.7	3.373	4.5 4.3	71.4 72.3 70.3	8.6 8.4 7.8	41-4 41-3 51-3	4.4 9.2 8.6 <u>1</u> J
LELAND			DELTAPINE	E 26		100	PERCENT							
SLM	51	34 35	1.07	43 43	47 45	46 46	24 25	5.8	1.6	3.0	69.3	4.8 4.8	51-3 41-3	7.2
LYON			STONEVILLE	LE 825		100	PERCENT							
SG0 SG0 SG0	51	35 35 35	1.10	45 41 43	9th 9th 2th	91 96 89	22 22 23	4.7 4.6 5.1	4.9 4.1	6.70 5.30 1.00 1.00 1.00	72.8 65.3 65.2	8.3	41-3 51-4 51-4	10.5 10.9 9.5
PANTHER B	BURN		DELTAPINE	E 55		80	PERCENT							
SLM	1155	36 36 36	1.10	45 43 42	†† ††† †††	91 92 89	22 24 23	5.5	2.8	3.7 4.1 3.7	76.5 71.0 75.0	8.6	31-3 51-3 41-3	7.51
SARDIS			MCNAIR 235	35		75	PERCENT							
ZZZ	125	333 355	1.10	43 44 45	43 41 39	91 96	23 25 25	5.67	8.58 3.58	4.7 4.2 5.1	72.5 70.2 72.0	8.4 8.2 7.7	41-3 41-4 41-2	8.3 6.6
MCOTTON ST	FUCK TO	11 COTTON STUCK TO PROCESSING ROLLS	G ROLLS.											

32.3 32.7 32.8 33.9 33.1 33.6 33.1 32.6 31.8 32.7 33.9 32.4 32.6 32.8 32.9 32.7 Rd : -b DYED PCT. 27.7 26.9 26.9 25.8 26.6 26.2 27.3 28.0 26.5 27.3 28.4 25.8 28.0 27.1 COLOR OF FINISHER DRAWING SLIVER UNITS 6.1 4.6 5.0 6.7 4.6 5.4 4.4 5.59 BLEACHED PCT. 85.4 90.5 90.2 90.7 89.9 89.8 89.8 89.0 88.2 90.6 91.3 92.1 90.7 90.5 Rd 8 8 9 . 9 88.9 8.9 855 0 % ~ 250 8888 0,00,00 999 GRAY 69.3 85.1 84.7 75.0 72.2 85.7 76.9 68.6 82.1 78.1 75.1 85.7 PCT. Rd SPY NO. NO. 44 43 49 55 46 66 448 444 444 51 41 41 41 53 50s NO. 576 468 468 548 586 502 336 514 356 402 514 410 224 166 276 330 150 NEPS 22s : PERCENT PERCENT PERCENT PERCENT PERCENT PERCENT . NO. 156 122 86 88 114 120 28 34 42 78 86 100 INDEX INDEX 22s : 50s ELONGATION ! APPEARANCE 02 09 09 70 80 02 70 60 80 YARN PROPERTIES 100 900 120 100 110 100 110 80 90 90 80 80 PCT. 22s : 50s 4.6 4.0 3.9 545 5450 4.3 3.8 4.0 4.0 4.4 4.7 5.4 5.5 PCT. 5.6 5.4 4.9 5.5 6.0 6.2 5.9 4.8 6.5 6.5 8.5 6.4 6.1 6.5 825 STONEVILLE 825 DELTAPINE 26 DELTAPINE 55 50s LBS. STONEVILLE STONEVILLE 27 27 28 31 28 28 32 30 28 30 235 36 28 39 STRENGTH .. MCNAIR LBS. 22s 100 106 91 986 99 97 118 GRADE : STAPLE 32ND IN. 35 35 36 36 36 322 AND CLASSIFICATION 34 35 PRODUCTION AREA 521 521 551 51 51 512 BURN CODE HOLLANDALE MISSISSIPPI GREENWOOD PANTHER SARDIS ELAND NAME SLM LYON SGO SGO ZZZ ΣΣΣ

TABLE 6. -- CONTINUED

TABLE 6. -- CONTINUED

	-I& CAR  WASTE	PCT.		7.0		6.7 7.1 7.9 <u>1</u>		6.7 <u>1</u> J 6.4 7.7 <u>1</u> J		5.61/ 6.9 6.91/		8.9		6.3	
	100	NO.		31-1 31-4 41-4		31-3 42-2 41-4		31-3 42-1 31-3		41-3 41-3 31-1		42-2 41-4 52-1		31-3 52-1 31-3	
OLOR AW ST	q+	UNITS		8.2 8.8 7.6	,	9.0		9.6		9.3 8.8 7.9		10.2 8.1 .9.4		9.4.6	
	Rd	PCT.		77.5 75.2 73.0		75.3 68.2 72.0		75.5 70.5 76.0		72.7 73.3 78.3		69.3 72.0 67.3		76.2 69.0 76.3	
	TOTAL WASTE	PCT.		2.8		2.9 2.4 4.3		3.9		3.2		33.5		2.9 2.1 2.6	
SHIRLEY NONL	i 1 Ш 1 — 1 Ш	PCT.		7.1 9.1 9.1		2.6		2.0		2.1 1.5		2.6		2.0	
1/8"	20	PCT.		5.1 6.0 5.5		5.9 4.9		6.3 6.0 5.7		50.0		5.4 5.1		6.1 5.4 5.4	
H	 	G/1EX	80 PERCENT	22 24 23	75 PERCENT	22 23 22	75 PERCENT	25 25 22	80 PERCENT	23 22 22	75 PERCENT	21 23 24	90 PERCENT	21 22 22	
	ΙШ<	MPSI		91 90 92		91 89 89		96 90 92		97 96 93		98 86 6		91 88 91	
	MICKO- NAIRE	RDG.		24 24 24		9t1 2t1 2t1		9† 8† 8†		52 52 47		44 45 48		49 51 51	
	50/2.5 UNIF.	PCT.	55	44 44 43	61	43 43 41	. 213	44 45 43	825	7 7 7 7 7 7 7		41 42 43	213	44 44 43	
1 ! !	1882		DELTAPINE	1.11	DELTAPINE	1.10	STONEVILLE	1.10	STONEVILLE	1.09	MCNAIR 220	1.06	STONEVILLE	1.06 1.04 1.03	ROLLS.
'REA	L I	32ND IN.	J	35 35 35	J	334 354 354	ν,	332 350 300	0,	335 355	۷	ካε 38 18	ŭ,	35 34 34	PROCESSING
PRODUCTION AREA	CLASSIFI  RADE	ME CODE	ISSISSIPPI SILVER CITY	4 4 1 1 1	WATER VALLEY	41 LT SP 42 51	٦. ٦	31 LT SP 42 41	Ш	1 1 1 1 1	SEE NGTON	LT SP 52 51 51	NO	41 LT SP 42 LT SP 42	MOOTTON STUCK TO PROCESSING ROLLS
	1	NAME	MISSISSIPPI SILVER CIT	SLM SLM SLM	WATER	SLM	MISSOURI BERNIE	SLM	STEELE	SLM	TENNESSEE MILLINGTON	EEE	TRENTON	SLM	11corro

TABLE 6. -- CONTINUED

		q-	UNITS		32.8 34.4 33.0		33.4 32.5 32.5		33.4 32.3 32.8		33.7 34.7 32.6		32.0		33.6 31.9 33.1
>	YQ	- p	PCT.		26.7 24.8 26.7		26.2 27.5 27.8		26.0 27.7 27.2		25.7 24.6 27.4		27.7 26.4 27.0		25.7 27.8 26.8
RAWING	03	q+	UNITS		5.2	,	3.6 4.6		0.9 4.9 6.0		50 00 50 00 50 00		4.5 4.8		55.5
NISHER	BLEACI	i .	1 -		92.1 94.2 92.5		91.3 90.6 91.6		88.6 91.1 91.7		91.4 85.0 89.5		90.6 89.4 91.4		92.3 89.9 91.3
3 OF F		q+			9.7		8.7 8.8		10.2 9.9 9.6		4.0.6		9.7		9.60
00	İ	о 1 го	PCT.		78.4 74.2 86.7		79.8 70.9 84.6		77.4 73.1 74.6		75.6 74.5 75.8		67.9 85.8 71.6		77.9 70.6 85.0
			NO.		46 44 53		45 40 42		58 43		51 40 48		35 52 45		43 37 39
	S	50s	i 0		358 378 184		348 200 392		234 118 396		344 450 272		306 174 306		220 170 246
	1 1	228	0	PERCENT	84 36 46	PERCENT	56 48 58	PERCENT	982 46	PERCENT	94 94 56	PERCENT	††8 ††† 8	PERCENT	58 58 62
TIES	ANCE		! —	80	70 20 90 90 90 90 90 90 90 90 90 90 90 90 90	75	70 60 70	75	90 70 70	80	80 60 70	75	70 70 70	90	70 60 70
PROPERTI	APP	228	INDEX		90 100 90		90 100 90	,	1100		110		1100		110 90 90
YAR	ATION	: 508			5.0 4.8 4.2		5.3 4.6		5.3		4.5 4.5		4.5 4.4 3.7		4.7 4.6 3.9
1 1	ELONG	22 s	PCT		6.0		5.73	13	6.7	25	6.1 5.6 5.6		5.7.0	13	5.5.6
1	_	50	LBS.	PINE 55	31 30 33	PINE 61	33	VILLE 2	38 37 26	VILLE 8	33 29 30	R 220	26 36 31	VILLE 2	30 28 26
	STR	228 :	LBS.	DELTAPINE	99 95 100	DELTAPINE	102 87 90	STONEVILLE	116 108 90	STONEVILLE	104 91 96	MCNAIR	82 108 100	STONEVILLE	99 86 85
		STA	SND I		333		35 34 35		333		35 35 35		34 34 34		35 34 34
PRODUCTION AREA	SSIFICA		CODE	PP1 CITY	41	VALLEY	41 SP 42 51		31 SP 42 41		41 41 41	TON	. SP 52 51 51		41 - SP 42 - SP 42
PRODU	AND CL	GRA	I	MISSISSIPPI SILVER CITY	SLM	WATER V	SLM SLM LT	MISSOURI BERNIE	SLM LT SLM	STEELE	SLM	TENNESSEE MILLINGTON	L E E E E	TRENTON	SLM LT SLM LT SLM LT

TABLE 6. -- CONTINUED

PRODUCTION AREA	N AREA		FIE	FIBER LENGTH		F	F1BER STRENGTH	1/8"	SHIRLEY	SHIRLEY ANALYZER NONLINT		COLOR OF RAW STOCK	×	PICKER
CLASSI  RADE	FICATION STAPL	<u> </u>	2.5% SPAN	50/2.5 UNIF.	MICRO- NAIRE	ZERO GAGE	1/8"   GAGE		VISIBLE WASTE	TOTA:	Rd	q + 1	: COLOR : CODE	% CARD   WASTE 
COD	1 			PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
TENNESSEE TRIMBLE		STO	STONEVILLE	3 825		~	85 PERCENT							
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	34 34 34		1.06 1.05 1.06	43 43 43	50 44 44	93 90 91	21 21	4.9 5.4 4.7	1.6	2.2 4.3	73.7 74.4 71.0	0.80 6.60 6.60 7.60	31-4 31-4 41-3	7.0
SOUTH TEXAS BISHOP		TAM	TAMCOT CAMD	10 E			70 PERCENT					,		
M M LT SP 32	30		0.92 0.95 0.96	44 44 44	33 35 35	84 85 89	19 20 19	7.7.7. 7.0.8.	1.1 1.4 1.3	0.00 5.55.30	78.0 76.5 76.0	10.8 9.7 10.0	12-1 21-4 21-4	7.4 6.2 7.9
BISHOP		TAM	TAMCOT SP-37	-37		~	80 PERCENT							
M LT SP 32 SLM SP 43	331		0.97 0.98 0.99	45 43 43	32 40 35	80 77 88	22 22 20	6.2.2	3.1	33.5	78.8 74.3 68.0	10.5	11-4 32-1 43-1	7.1
BROWNSVILLE		GP	3774			~	80 PERCENT							
SLM 41 SLM 41 SLM 41			1.06 1.03 1.04	48 46 45	41 41 42	79 83 71	23 22 22	6.2	2.0	4.0 3.7 2.7	76.5 77.2 76.8	9.8	31-3	7.2 6.2 6.3
DRISCOLL		TAM	TAMCOT SP-37	-37		0.	99 PERCENT							
SLM 41 M 31 SLM LT SP 42	313		0.96 0.98 0.99	†† †3 †3	3333	8 8 3 3 3	21 20	6.05	1.7 2.0 2.0	0 8 8 0 8 9 0 8 9 0 8 9	75.5 76.5 74.5	10.5	22-2 21-3 32-1	7.5 <u>1</u> J 7.3 7.7
160TTON STUCK TO PROCESSING ROLLS	TO PROCES	SSING RO	LLS.											

TABLE 6. -- CONTINUED

PRODUCTION AREA	AREA			1	YARN	PROPERT	TES				00	COLOR OF FI	INISHER	DRAWING	SLIVER	
AND		STREN	 	لنا ١	NOIT	APPEARANCE	ANCE	12	 		GRAY	i —-		CHED	DYED	Q.
GRADE	STAPLE	22s :	-	22s :	508	22s :	50s	22s :	50s	NO.	Rd ::	q+	Rd :	q+	Rd :	q- :
NAME CODE	32ND IN.	LBS.	LBS.	2	PCT.	INDEX	INDEX	0 V	NO.	. ON	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
TENNESSEE TRIMBLE		STONEVILLE	VILLE 8;	825			85	PERCENT								
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	ቱε ተε ተε	888 86 5	30 27 27	5.3 4.8	4.7 4.0	100 90 90	70 70 60	30 38 34	244 384 348	43 35 42	74.3 73.0 72.1	9.6	91.2 92.1 90.6	5.1 4.5 4.7	26.1 25.7 26.9	33.0 33.6 32.8
SOUTH TEXAS BISHOP		TAMCO	TAMCOT CAMD	lП			70 F	PERCENT								
M 31 M LT SP 32	29 30 30	74 83 89	20 <u>1</u> 24 <u>1</u> 28	57.77 5.83	4.6 5.0 4.7	06 06 06 06	70 60 60	36 34 24	166 236 142	25 <u>2</u> / 36 41	79.0 78.8 76.7	10.6 10.0 10.4	90.3 90.1 90.4	4.3 4.9	27.8 27.9 28.7	32.4 32.6 32.1
ВІЅНОР		TAMCOT	T SP-37				80	PERCENT								
M LT SP 32 SLM SP 43	29 31 31	93 89 89	29 31 27	5.7	4.7 3.9 4.3	90 100 110	80 70 60	26 46 48	264 244 336	43 46 43	79.3 76.7 71.6	10.3	91.6 90.5 90.3	4.6 5.7 5.8	28.9 27.3 28.8	31.4 32.5 31.5
BROWNSVILLE		GP 3774	47				80 8	PERCENT								
SLM 41 SLM 41 SLM 41		105 105 104	37 35 34	666 5.55	200 200	90 110	80 80 70	†8 9† †9	180 158 316	55 57 57	80.5 79.9 80.2	9.1	92.0 92.6 91.8	4.0 4.2 4.2	28.2 27.5 27.1	32.2 32.6 33.2
DRISCOLL		TAMCOT	T SP-37				9 66	PERCENT								
SLM 41 M 31 SLM LT SP 42	29 31 31	78 79 82	23 11 22 1 24 3	5.1	4.8 4.4	80 70 80	09 09 60	102 36 38	204 122 240	25.2 25.2 25.2 25.2	77.1 79.9 76.8	10.5	91.8 92.7 91.7	2.4 2.3 3.4	28.8 28.2 29.4	31.9 32.8 31.5
The state of the s	100111 001	14100	MO 4 / 4	, , , ,	0 0 14 0 4 7	0				l		i i				

<sup>1</sup>JEND BREAKAGE TOO HIGH TO SPIN 50s YARN, 36s YARN SPUN AND STRENGTH ADJUSTED TO THE EQUIVALENT OF 50s. <sup>2</sup>ITHIS IS AN ESTIMATED VALUE BELOW THE RANGE OF THE TEST. <sup>3</sup>END BREAKAGE TOO HIGH TO SPIN 50s YARN, 44s YARN SPUN AND STRENGTH ADJUSTED TO THE EQUIVALENT OF 50s.

TABLE 6. -- CONTINUED

  P CKER	& CARD   WASTE 	PCT.		7.0 7.8 8.2 8.6		5.8		0.4° 0.4° 0.4°		7.0		889 7.8.6.		7.6
	i 0 0	NO.		21-4 31-4 43-2 43-4		21-3 31-3 31-4		11-4 21-4 21-3		21-3 31-3 21-4		21-3 31-3 43-4		21-3
COLOR OF RAW STOCK	+	UNITS		9.5 9.3 10.7 11.1		9.99 2.90 3.00		9.6 9.6		10.0 9.1 9.5	,	9.6		. 9.1 8.8 7.8
	Rd	PCT.		76.5 73.7 64.5 64.0		77.5 75.7 74.3		78.7 77.3 78.0		77.0 75.3 76.0		78.5 76.0 65.0		78.2 79.2 77.5
N		PCT.		34.33		3.2 2.5 5.5		1.3		3.0 2.2 5.2		5.50 0.00		2.7
	SIB	PCT.		2.7 3.7 3.1		2.0		1.0		1.8 3.0 1.7		33.7		2.1
1/8" FI 0N-		PCT.		0 ñ ñ ñ 0 . 0 ñ ñ 0 .		5.25 5.25 5.00		55.50		5.2		6.3		4.4 4.6
FIBER	: 1/8" : GAGE	G/TEX	95 PERCENT	22 21 20	80 PERCENT	24 23 26	70 PERCENT	#2 72 72	97 PERCENT	23 22 24	90 PERCENT	23 23 20	70 PERCENT	22 21 22
STR	2	MPSI	6	88 88 82 82	8	88 88 97	7	92 85 88	6	85 79 87	6	82 79 84	7	46 93 94
Ca	- <	RDG.		32 30 33 37		9t 170		748 48 47		35 38 39		32 36 36		525 449 48
ER STH	50/2.5 UNIF.	PCT.	37н	24 14 14 94		94 94 46	825	45 46 45	213	46 45 45		44 44 46	256	44 44 45
FIBER	2.5% : SPAN :	     .   Z   ~ 	TAMCOT SP-37H	0.97 0.97 0.96 0.98	MCNAIR 220	1.06 1.04 1.05	STONEVILLE	1.05	STONEVILLE	1.02	GP 3774	0.99	STONEVILLE	1.04
REA	  -  -	32ND IN.		30 31 30 30	_	8 8 8 8 8 8 8 8 8	,	34 33 33	0,		J	31 32 31	,	
PRODUCTION AREA	· · · · · · · · · · · · · · · · · · ·	CODE	SП	41 51 53 53		31 41		311	LLE	4 41 41		41 41 53	0	31
PRODU	-	NAME	SOUTH TEXAS KINGSVILLE	SLM LM LM SP LM SP	MERCEDES	SLM SLM SLM	MISSION	ΣΣΣ	RAYMONDVILLE	SLM	ROBSTOWN	SLM SLM LM SP	SAN BENITO	SEA

32.3 33.1 33.6 32.7 33.0 32.8 31.8 32.4 30.6 30.6 30.4 33.3 32.5 31.4 32.0 30.4 32.5 32.0 32.9 q-DYED 26.6 26.7 26.5 PCT. 29.3 28.0 28.9 27.4 26.3 26.3 30.4 26.8 27.9 29.0 28.9 29.3 27.0 28.4 26.9 COLOR OF FINISHER DRAWING SLIVER Rd UNITS 7.50 7.4 7.4 4.4 5.1 4.6 4.5 4.7 4.8 5.4 4.2 4.4 4.5 5.1 4.3 BLEACHED 91.4 90.5 89.7 90.9 92.2 91.3 90.8 95.1 94.7 91.7 88.3 91.4 94.6 92.8 94.0 94.0 Rd UNITS 9.9 9.60 10.0 9.0 9.7 200 0,000 GRAY 78.5 77.8 77.6 79.7 78.9 79.0 77.6 77.3 76.9 80.5 77.6 66.9 80.280.97 78.2 76.3 69.6 67.1 PCT. Rd SPY NO. NO. 49 59 59 48 46 42 39 51 44 41 43 40 41 47 50s . No. 246 430 138 206 164 190 204 208 100 308 236 414 116 106 156 NEPS PERCENT PERCENT PERCENT PERCENT PERCENT PERCEN 22s . NO. 60 68 50 36 52 40 54 66 48 48 60 92 INDEX INDEX APPEARANCE 09 09 09 70 70 80 80 70 70 70 60 80 09 70 27 YARN PROPERTIES 22s 90 80 90 90 90 90 120 100 110 90 70 80 00 90 80 50s ELONGATION 4.7 4.8 4.4 4.6 5.0 4.6 4.7 4.6 4.7 4.8 5.5 4.8 5.0 4.6 3.9 4.0 4.3 PCT PCT. 22s 0000 0000 6.0 5.7 5.7 6.0 6.2 6.4 6.3 55.0 6.3 6.4 6.1 256 825 213 SP-37H LBS. 50s STONEVILLE STONEVILLE STONEVILLE 30 30 27 29 220 36 40 37 34 37 38 32 30 28 28 28 29 31 STRENGTH 3774 **TAMCOT** MCNAIR LBS. 22s 107 103 93 STAPLE 32ND IN 30 30 30 333 337 333 AND CLASSIFICATION 333 334 PRODUCTION AREA 53 53 53 314141 31 4174 41 41 53 313141 RAYMONDVILLE CODE SOUTH TEXAS KINGSVILLE SAN BENITO GRADE ROBSTOWN MERCEDES SP SP MISSION NAME SLM SLM SLM ΣΣΣ ZZZ SIS

TABLE 6. -- CONTINUED

PRODUC	PRODUCTION AREA		L              	FIBER LENGTH		STR	FIBER	1/8"	SHIRLE	LYZE	! ! ! !	OLOR AW ST		
GR	A3317	LE	-1 2.5	/2. NIF	ر – د	ı Æ O	AG	GATION	STB	TOTAL	p	q+	: COLOR : CODE	I& CARD  WASTE 
NAME	CODE	32ND !N.	.   Z   - 	PCT.	RDG.	MPS	G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
SOUTH TEXAS SANTA ROSA	o ∢		STONEVILLE	LE 213		100	O PERCENT							
SLM	41 41 31	34 33 34	1.05 1.05 1.04	146 145 147	46 48 50	88 88	24 22 24	0.25 0.88	 ~~~	2.0	75.5 76.5 78.2	9.0	31-3 21-3	6.9
CENTRAL TEXAS BATESVILLE	XAS		STONEVILLE	LE 213		6	90 PERCENT							
SLM	31 41 41	48 34 34	1.04 1.08 1.09	44 46 46	40 50 46	88 86 85	24 24 2 <b>2</b>	5.7	1.4 2.3 2.1	1.9 2.9	77.8 75.7 75.8	9.8	21-3 31-3 31-3	6.8 7.2 6.5
NAVASOTA			DELTAPINE	E 16		6	95 PERCENT							
SLM SLM SLM	41 41 41	34 35 35	1.07	†† †† ††	47 45 50	91 92 86	21 23 22	5.4 6.1	1.9 1.3	20.0 30.0 30.0	76.5 74.8 75.0	9.88 4.4.4.4.	21-4 31-4 41-3	55.4
NORTHWEST TEXAS ANTON	TEXAS		PAYMASTER 266	R 266		80	88 PERCENT							
SLM LM LM LT SP	51 41 51 P 52 2	32 33 1 32	1.02 1.01 1.04 1.02	42 423 433 453	41 40 35 41	86 87 82 85	24 23 23 24	7.1 6.7 7.3 6.6	8.83.4 8.7.4 5.4	0000 0000	76.0 75.0 76.0 74.0	80.80	31-4 31-3 31-3	8.7 8.7 8.7 8.5
LORENZO			PAYMASTER	R 303		7.	75 PERCENT							
SLM LT SP SLM SLM LT SP LM LT SP	P 42 41 P 42 P 52 2	32 31 30 32	1.01 0.98 0.94 1.01	44 442 445	34 38 41 40	88 86 88 87	22 22 21 23	6.9 6.9 6.5	3.2.2 3.2.1	4.9 3.7 4.3	76.1 75.4 74.8 73.5	. 88 . 9 . 9 . 9 . 4 . 2 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5	31-4 31-3 31-3	7.2 7.8 8.5 8.0
1/COTTON STUCK TO PROCESSING BOLLS	ICK TO	N DBOCESSING	0 7 700											

JCOTTON STUCK TO PROCESSING ROLLS. ZAREDUCED FROM 42 BECAUSE OF BARK.

TABLE 6. -- CONTINUED

PRODUCTION AREA	ξΕΑ			-	YAR	10	TIES	1			 	LOR OF	INISHER	1 2	LIVER	1
		STREN		ELONG	ız	APPEA	—-	NEP					BLEA		YQ	
GRADE	STAPLE	228 :		22s :		22s	0 s	••   	5		ם ו		i	q+	Rd	q-
NAME CODE 3	32ND IN.	LBS.	BS.		PCT.	INDEX	Z   -			. ON	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
SOUTH TEXAS SANTA ROSA		STONE	STONEVILLE 2.	213			100	PERCENT								
SLM 411 SLM 411 M 311	34 34 34	112 108 106	38 36 36	6.5	5.1	110 120 110	80 90 90	76 72 40	234 192 96	52 52	78.9 79.5 79.7	9.5	91.8 91.2 94.3	7.00	28.3 25.5 27.3	32.5 34.1 32.8
CENTRAL TEXAS BATESVILLE		STONEVILLE	VILLE 21	13			90	PERCENT							,	
M 31 SLM 41 SLM 41	34 34 34	102 103 104	34 32 32	6.59	4.8 4.5 8.3	100 110 90	09	46 146 78	196 410 380	52 49 46	79.3	9.6	94.2 91.6 88.2	4.6 4.5 6.0	27.0	32.6 33.1 32.4
NAVASOTA		DELTAPINE	PINE 16				95	PERCENT								
SLM 41 SLM 41 SLM 41	34 35	102 109 106	33 38 34 34	6.0 7.0 6.7	45.0° .	80 90 110	70 70 60	32 64 40	430 500 222	51 56 56	78.9 78.7 77.0	88.0	92.4 91.5 92.4	4.6 3.9 3.4	27.3 27.2 26.8	32.8 32.9 33.4
NORTHWEST TEXAS ANTON		PAYMASTER	STER 266	9			88	PERCENT								
LM LT SP 52 1	33333	109 107 102	37 37 36 34	6.7 6.5 6.3	45.39	80 70 80 90	60 60 60	104 66 142 72	332 260 368 212	49 47 52 44	76.5 76.5 71.4 76.0	7.6 9.7 9.8	91.5 90.9 91.4 91.3	たったい たったい たったい	29.6 29.4 29.6 31.7	31.0 31.0 31.0 29.6
LORENZO		PAYMASTER	STER 303	3			75	PERCENT								
SLM LT SP 42 SLM 41 SLM LT SP 42 J LM LT SP 52 J	32 31 30 1 32	100 92 95 98	32 29 31 32	6.0 6.0 6.0	4.4 4.6 5.0	80 80 80 70	09	108 82 50 74	344 156 316 322	49 40 47	88.1 78.3 76.7 75.4	9.7 9.6 9.9	90.9 91.5 91.4 91.0	42.00 4.00 0.00	28.6 29.0 27.9 29.6	31.4 31.8 31.2
JREDUCED FROM 42	2 BECAUSE	OF BARK														

TABLE 6. -- CONTINUED

PRODUCTION AREA	AREA		FIBER LENGTH				1/8"		ALYZ Ţ	   	OLO AW		PICKER
GRADE	STAPLE	2.5% SPAN	عا ٠	5 <del>-</del>		: 1/8" : GAGE	GATION	VISIBLE WASTE	: TOTAL : WASTE	Rd	q+ 		I & CAKD   WASTE
NAME CODE	ı		PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
NORTHWEST TEXAS LUBBOCK		COKER 312			80	80 PERCENT	-						
SLM LT SP 42 SLM 41 SLM 41	336 356 35	1.12	42 42 52 54	43 40 46	87 84 89	24 25 24	6.5 5.8 5.7	2.2	3.9 4.2	75.2 76.0 73.3	9.3 9.0	31-3 31-3 32-2	8.1 7.9 1 8.1
PETERSBURG		PAYMASTER	303		7	70 PERCENT							
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42 LM SP 532	32 32 32 32	1.03 1.01 1.06 1.04	12 1 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	38 34 37 37	88 83 13	22 22 22 21	6.8 6.7 6.4 7.2	# 3.55 # .20	5445 3750	78.4 76.0 78.0 70.2	8.9 8.8 10.2	21-2 31-4 31-3 42-1	8.3 7.7 8.0 8.6
RALLS		PAYMASTER	303		7	75 PERCENT							
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42 LM LT SP 523	32 32 32 32 32 32 32 32 32	0.99 1.01 1.02 1.00	445 443 450 450 450 450 450 450 450 450 450 450	36 40 37 39	87 87 84 85	22 23 23 24	6.2 6.3 7.1	2.3 3.1 3.2	3.7.7 4.7.5	74.1 75.4 76.3 75.0	9.90 9.33 1.00	31-4 31-4 31-3 31-4	8.0 8.4 8.3 7.7
TULIA		TAMCOT CAMD	1D E		7	70 PERCENT							
SLM LT SP 42 SLM LT SP 42 SLM LT SP 42 SLM LT SP 42	31 32 32 32	0.95 0.95 1.02 1.00	47 44 43 42	43 44 38 40	91 88 85 85	25 21 20	7.0 6.4 7.2 6.6	3.2 3.2 3.4	44.3 5.6 5.6	76.0 73.0 76.0 72.3	9.8 4.6 9.6	31-3 41-3 31-2 32-2	7.6 9.4 7.8 11 9.6
WILSON		PAYMASTER	303		80	80 PERCENT							
SLM LT SP 42	30	0.97	42	41	98	20	6.1	2,3	4.5	73.2	9.6	31-4	8.7
1 COTTON STUCK TO	PROCESSING ROLLS.	ROLLS.											

LICOTTON STUCK TO PROCESSING ROLLS. ZAREDUCED FROM 43 BECAUSE OF BARK. 31REDUCED FROM 42 BECAUSE OF BARK.

TABLE 6. -- CONTINUED

PRODUCTION AREA				YARN	PROPERTIES	I ES			—-	ŏ	COLOR OF FI	INISHER	DRAWING	SLIVER	
AND CLASSIFICATION			ELONC	ı —	APPEARANCE	ANCE	NEPS	1	1 2	CRAY	\.\	BLEAC	LEACHED	DYED	ED
: STAPL	E   22s :	50s	$\sim$	50s	22s :	50s	22s :	50s l	NO.	Rd ::	q+	Rd :	q+	Rd	q- :
NAME CODE 32ND IN		LBS.	PCT.	PCT.	INDEX	INDEX	NO.	NO.	NO.	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
NORTHWEST TEXAS LUBBOCK	COKER	312				80 P	PERCENT								
SLM LT SP 42 36 SLM 41 36 SLM 41 35	106 110 107	37 37 37	6.2	5.0	70 70 90	09 09 09	192 174 130	542 590 510	56 60 51	76.0 77.8 76.4	9.8 9.7 10.1	91.6 90.6 90.1	4. 5.5 4.	27.0 28.3 28.9	32.7 32.1 31.5
PETERSBURC	PAYMASTER	STER 303	3			70 P	PERCENT								
SLM LT SP 42 31 SLM LT SP 42 32 SLM LT SP 42 33 LM SP 53 1J 32	101 102 108 95	33 30 31	6.0 6.0 6.0	45.7	60 70 80 70	09	154 74 122 158	426 342 490 290	50 61 49	76.6 77.1 78.2 73.2	9.5 9.7 10.7	91.4 90.9 92.0 91.5	45.4	29.0 26.8 28.0 30.6	31.3 32.6 32.2 30.4
RALLS	PAYMASTER	STER 303	33			75 P	PERCENT								
SLM LT SP 42 32 SLM LT SP 42 32 SLM LT SP 42 32 LM LT SP 52 2J 32	97 100 102 101	32 33 35	0.0000	4.5.0 4.00 9.00	70 70 80 60	0900	74 108 58 132	320 358 380 284	43 52 50	77.0 76.6 78.0 75.9	9.8 10.1 9.9	92.3 93.9 88.5	4.05 4.05 1.25	29.7 28.1 27.8 31.8	31.0 31.9 32.1 29.6
TULIA	TAMCOT	CAMD	ш			70 P	PERCENT								
SLM LT SP 42 31 SLM LT SP 42 30 SLM LT SP 42 32 SLM LT SP 42 32	102 75 101 92	33 21 3 34 31	6.5	5.4.6	90 120 80 70	70 09 09	44 38 42 124	300 212 270 472	49 254 53 41	74.1 74.7 77.2 75.6	9.8 9.7 9.4	90.2 89.6 91.9	44.50 6000	29.9 28.4 28.8 29.7	30.0 31.3 31.0 30.8
WILSON	PAYMAS	PAYMASTER 303	2			80 P	PERCENT								
SLM LT SP 42 30	92	30 3/	5.7	5.5	80	10	54	142	39	75.6	7.6	91.3	4.7	29.6	30.9

1/REDUCED FROM 43 BECAUSE OF BARK.
2/1 REDUCED FROM 42 BECAUSE OF BARK.
3/1 END BREAKACE TOO HIGH TO SPIN 50s YARN. 36s YARN SPUN AND STRENCTH ADJUSTED TO THE EQUIVALENT OF 50s.
4/1 THIS IS AN ESTIMATED VALUE BELOW THE RANGE OF THE TEST.

TABLE 6. -- CONTINUED

STAPLE   S.SAW   SOLP   MAINE   CAGE   TOTAL   MASTE   TOTAL   MASTE   TOTAL   MASTE   TOTAL   MASTE   TOTAL   MASTE	PRODU	PRODUCTION AREA	AREA		BER NGTH				1/8"		ANALYZE		OLOR O AW STO		
LLE 213  44	1	LASSIF1  )E	LE		: 50/2.5 : UNIF.	NAIRE	ZERO	1/8"   GAGE	CATION	VISIBLE WASTE	1	1 1	q+ :	: COLOR : CODE	I& CAKU  WASTE 
LLE 213  441  444  445  444  445  446  448  449  449  449  449  440  441  442  442  443  444  444  444  444	N N	CODE	32ND IN	- N	PCT.	RDG.	MPSI	G/TEX	PCT.		PCT.	i •	UNITS	NO.	PCT.
LLE 213  LLE 214  LLE 215  LLE	AR I ZONA BOW I E			STONEVIL	21		Φ								
NE 61   1.1   2.2   77.3   9.3   21-4   7.11   1.4   3.7   80.0   8.0   21-2   7.3   1.1   1.4   3.7   80.0   8.0   21-2   7.3   1.1   1.4   3.7   80.0   8.0   21-2   7.3   1.1   1.8   81.3   8.0   21-2   7.3   1.1   1.8   81.3   8.0   21-1   6.1   8.2   8.0   8	ΣΣΣ	31	335 355	1.10	†† †† ††	44 41 39	79 87 81	21 23 22	7.3 6.1 6.9					21-2	5.4 7.0 5.8
NE 61  H2 H2 H2 H2 H2 H2 H2 H2 H2 H2 H2 H2 H2 H	BUCKEYE			STONEVIL	21		7								
NE 61  42  42  442  443  447  865  23  6.73  1.11  1.18  81.3  8.00  21-1  6.11  NE 41  NE 41  NE 41  100 PERCENT  NE 55  LLE 825  43  448  449  440  440  441  442  444  444  444  444	SLM+ SLM+	31 31 40	35 35 34	1.06	43 413 413	94 64 64	88 94		4.54					h- h- h-	- E 2
NE 41  H2 H9 83 24 7.3 1.1 1.8 81.3 8.0 21-1 6.1  NE 41  H3 H8 94 23 6.7 1.5 2.8 79.8 8.1 21-2 6.4  H3 H8 94 23 5.3 2.1 3.8 80.1 8.6 21-1 6.8  NE 55  LLE 825  H4 9 88 22 4.6 7.0 1.1 2 2.8 80.1 8.8 21-1 7.4  H3 H8 92 22 4.6 7.0 2.0 3.5 80.1 8.6 21-1 6.8  H4 2 H2	CHANDLER			DELTAPIN			6								
NE 41  43	ΣΣΣ	311	335 55 55	1.12	75 75 75 75 75 75 75 75 75 75 75 75 75 7	11 11 61 61	83 86 87	24 23 24	7.3 6.7 7.0	1.51				21-1 21-2 21-2	
H2 H3 H8 94 25 5.9 2.0 3.5 80.1 8.6 21-1 6.8 14.7 44.3 44.5 94 23 5.3 2.1 3.8 78.2 8.8 31-1 7.4 24.5 5.9 1.4 2.3 79.5 8.4 21-2 6.3 31-1 7.4 21.2 2.3 80.1 8.8 21-1 7.5 8.4 21-2 6.3 1.2 2.8 80.1 8.8 21-1 7.5 1.2 2.8 80.7 8.4 21-1 6.6 1.2 2.8 80.7 8.4 21-1 6.6 1.2 2.8 80.7 8.4 21-1 6.6 1.2 2.8 80.7 8.4 21-1 6.6 1.2 2.8 80.7 8.4 21-1 6.6 1.2 2.8 80.7 8.4 21-1 6.6 1.2 2.8 81.0 8.0 21-1 6.5 1.3 1.2 2.2 81.0 8.0 21-1 6.5 1.3 1.3 1.4 92 22 4.8 2.2 3.5 78.2 82 31-1 7.6 1.3 1.4 88 22 4.6 1.7 2.8 81.0 7.7 21-2 7.6	ELOY			DELTAPIN			10								
HE 55  HZ 47 92 23 5.7 1.2 2.2 80.1 8.8 21-1 7.5 4.4 4.6 91 22 5.5 1.2 2.8 80.7 8.4 21-1 6.6 6.6 6.5 0.9 2.3 82.4 7.5 21-1 5.3 82.4 7.5 21-1 5.3 100 PERCENT  HZ 46 91 23 5.3 1.2 2.2 81.0 8.0 21-1 6.5 4.6 1.7 2.8 81.0 7.7 21-2 7.6	SLM SLM	411	335 55 55	1.10	43 43 43	48 47 43	94 94 91	25 23 24	50.00 0.00	2.0				21-1 31-1 21-2	6.8 7.4 6.3
H2 H7 92 23 5.7 1.2 2.8 80.1 8.8 21-1 7.5 4.4 4.6 91 22 5.5 1.2 2.8 80.7 8.4 21-1 6.6 6.5 1.2 2.8 80.7 8.4 21-1 6.6 6.5 1.2 2.8 80.7 8.4 21-1 6.5 3.3 82.4 7.5 21-1 5.3 100 PERCENT  H2 H6 91 23 5.3 11.2 2.2 81.0 8.0 21-1 6.5 4.3 44 88 2.2 4.6 1.7 2.8 81.0 7.7 21-2 7.6	MARICOPA			DELTAPIN			10								
42       46       91       23       5.3       1.2       2.2       81.0       8.0       21-1       6.5         43       44       92       22       4.8       2.2       3.5       78.2       8.2       31-1       7.6         43       44       88       22       4.6       1.7       2.8       81.0       7.7       21-2       7.6	ΣΣΣ	311	335 355 5	1.09	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 th 2 th 2 th	92 91 85	23 23 23 33 23 33 23 23		1.2		80.1 80.7 82.4		21-1	
42 46 91 23 5.3 1.2 2.2 81.0 8.0 21-1 6.5 43 44 92 22 4.6 1.7 2.8 81.0 7.7 21-2 7.6 43 44 88 22 4.6 1.7 2.8 81.0 7.7 21-2 7.6	PARKER	,		STONEVIL			10								
JCOTTON STUCK TO PROCESSING ROLLS.	SLM SLM	31 41 40	888 555	1.07	42 43 43	†† ††† 9†	91 92 88	23 22 25 25		2.2		- 8 -	88.	<del></del>	က်ဖည
	UCOTTON S	TUCK TO	) PROCESSING	ROLLS.											

33.2 32.1 32.0 33.5 32.4 33.0 32.7 34.0 32.1 32.8 33.1 33.8 32.7 32.1 32.6 33.3 q DYED PCT. 27.6 28.4 28.5 26.6 27.6 27.5 27.3 25.7 27.3 27.1 26.8 26.4 28.2 28.7 28.1 COLOR OF FINISHER DRAWING SLIVER Rd UNITS 4.6 5.1 5.7 3.6 4.3 400  $\tilde{\omega}$  $\tilde{\omega}$ 302 040 4. 4. BLEACHED たらな 444 4 8 4 93.2 91.0 92.1 91.1 91.6 89.8 91.8 94.8 92.5 90.4 92.5 91.5 PCT. 92.7 88.8 92.6 92.1 91.8 92.8 Rd 40.68 8 8 8 8 8 7 9.8 8.9 2.2 340 469 989 999 0000 GRAY 79.5 80.8 75.0 80.2 80.0 76.6 89.6 80.3 81.0 78.5 80.1 80.8 89.7 80.8 75.4 500 Rd PCT. 89. 80. 75. SPY NO. NO. 52 57 59 44 44 52 52 51 51 50s . NO. 252 264 276 574 284 368 404 512 416 204 356 430 356 344 336 306 328 288 NEPS 22s : PERCENT PERCENT PERCENT PERCENT PERCENT PERCENT NO. 52 66 130 36 60 66 INDEX INDEX 22s : 50s APPEARANCE 09 09 09 09 YARN PROPERTIES 09 60 1100 90 90 900 90 70 80 70 80 80 22s : 50s i PCT. 4.6 3.8 4.3 5.00 5.1 4.8 4.8 3.8 4.0 4.5 ELONGATION ~ 8 8 54.0 PCT. 6.3 6.0 6.4 5.1 5.0 5.5 5.3 200 202  $\omega$   $\omega$   $\omega$ 99. 66.7 25.00 213 825 213 DELTAPINE 55 DELTAPINE 41 DELTAPINE 61 50s STONEVILLE STONEVILLE LBS. STONEVILLE 29 30 34 35 34 33 35 STRENGTH 22s LBS. 101 99 103 95 106 104 106 102 106 105 STAPLE 32ND IN. 35 35 35 35 35 35 AND CLASSIFICATION PRODUCTION AREA 3141 31 31 31 40 41 41 31 3131 313 CODE GRADE MARICOPA CHANDLER BUCKEYE AR I ZONA BOW I E PARKER NAME SLM SLM SLM ELOY ΣΣΣ SLM SLM ΣΣΣ ΣΣΣ

TABLE 6. -- CONTINUED

TABLE 6. -- CONTINUED

PROC	PRODUCTION AREA	AREA	u		000		BER ENGTH	1/8"	SHIR	ANALYZE -INT		OLOR AW S		
		E	2.5% SPAN			ERO AGE		GATION	ı <i>−</i> ∽	TOT:	i o	q+	00 00	WASTE
NAME	CODE	32ND IN.	   .   Z   -	PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
ARIZONA QUEEN CREEK	E E K		DELTAPINE 70	02 :		10	100 PERCENT							
ΣΣΣ	31 11 11	335 355	1.09	41 44 42	14 14 14 13	90 88 88	21 23 24	5.2	4	2.5	81.2 80.5 80.4	8.5	11-2 21-1 21-2	5.6 6.6 6.1
SOMERTON		_	DELTAPINE	. 61		16	7 PERCENT							
ΣΣΣΣ	E E E E E	355 355 34	1.08 1.09 1.07	41 40 41 41	†† ††2 ††2 ††2	88 88 85 85	24 24 21 23	6.50 6.33 6.48	11.7.	0.000	82.1 80.0 81.0 80.0	8.2 7.5 7.8 8.4	21-1 21-2 21-2 21-2	7.2 7.5 8.0 6.7
WELLTON		_	DELTAPINE	. 70		7	75 PERCENT							
SLM	31 31 412]	335 555	1.10	43 45 41	0 9 7 8 7	89 95 87	25 23 23	6.7 5.9	1.4 2.2 8.3	2.5	81.0 77.1 79.4	8.2 8.8 7.6	21-2 31-3 31-1	6.4 7.2 7.5
CAL I FORN I A BAKERSFIELD	A ELD		ACALA SJ-2	Ś		6	99 PERCENT							
SLM	31 41 31	335 366 366	1.11	5 1 1 1 1	44 42 41	99 95 96	27 27 26	5.6	1.0	1.5 2.9 2.4	80.3 78.3 80.3	9.5	21-1 21-4 21-2	6.1 6.8 5.8 <u>1</u>
BAKERSFIELD	ELD	•	ACALA SJ-2	.5		5	94 PERCENT							
ΣΣΣ	31 31 31	35 35 35	1.07	45 45 45	47 42 42	102 93 95	27 26 24	4.9 5.1 5.9	0.0	1.7	78.0 78.4 78.2	0.6 4.8 4.8	31-1 31-1 21-2	3.9 6.2 1-1-1-1
COTTON S	TUCK TO	1/COTTON STUCK TO PROCESSING ROLLS.	ROLLS.											

JOOTTON STUCK TO PROCESSING ROLLS. ZIREDUCED FROM 31 BECAUSE OF GRASS.

TABLE 6. -- CONTINUED

1~	DYED	q- : p	T. UNITS		5 33.0 7 31.9		.9 32.6 1 32.3 5 33.6 7 34.5		7.5 32.6 8.2 31.9 7.3 33.1		.0 33.0 .3 32.3 .1 32.7		6 32.9 4 32.3 6 32.4	
ING SLIVE		- - - - -	TS PCT		7 27 8 28 7 29		5 27 0 28 8 26 6 24		804		8 27 5 27 3 27		3 26 2 28 0 27	
ER DR	EACHE		L ONIT		1 4. 5 3.		95723 44.5		1 4. 6 4. 8 3.		0 tt.		7 4. 3 4. 6 5.	
F FINI	¦		S PCT		92. 92. 93.		993.		91.		91.6		91.	
OLOR O	A≺	1 9	UNITS		8.9 1.8 8.3		88.7 8.2 8.7		8008		8.9 9.3 7.8		9.00	
	 	Rd	PCT.		90.2 80.6 76.9		80.8 80.8 81.0 J 74.7		80.3 79.8 75.7		89.2 79.0 80.7		88.9 78.7 78.6	
	! 	NO.	. ON .		50 60 61		43 42 42 55 25		55 61		74 79 82		63 64 64	
	EPS	: 50s		LN	364 404 470	LN	422 636 516 238	LN	478 368 318	LN	248 304 306	NT	418 578 358	
	- - -		X NO.	0 PERCENT	108 82 82	97 PERCENT	74 72 60 88	'5 PERCENT	102 54 66	99 PERCENT	100 96 118	94 PERCENT	84 192 98	
PROPERTIES	EAI	s : 50s	NDEX INDEX	100	09	6	09	7	09	6	02 00 100	6	09	
I N	l —-	 s	-		5 80 9 80 0 70		7 70 5 60 7 80 5 90		0 4 80 80 6		5 100 4 70 1 90		1 70 0 70 0 70	
	ONGATI	2s :	PCT. PCT		4. tr		- m & &		22.54		6.5		5.9	
		50s   2	LBS. P	DELTAPINE 70	31 6 36 6 38 6	PINE 61	27 30 30 241 5	DELTAPINE 70	36 6 36 5 37 6	SJ-2	46 50 51 6	SJ-2	44 43 52 43 52	
	STREN	22s :	LBS.	DELTA	98 109 109	DELTAPINE	91 88 91 85	DELTA	103 105 109	ACALA	127 133 139	ACALA	122 119 118	
		STAPLE	32ND IN.		35 35 35		35 35 34		35 35		35 36 36		333 55 50	
PRODUCTION AREA	AND CLASSIFICATION		CODE 3	REEK	311	2	3331		31 31 413	I ELD	31 41 31	IELD	31	
PRODUC			NAME	ARIZONA QUEEN CREEK	ΣΣΣ	SOMERTON	ΣΣΣΣ	WELLTON	SLMM	CALIFORNIA BAKERSFIELD	SLM	BAKERSFIELD	ΣΣΣ	

LIEND BREAKAGE TOO HIGH TO SPIN 50s YARN, 36s YARN SPUN AND STRENGTH ADJUSTED TO THE EQUIVALENT OF 50s, 2/1 THIS IS AN ESTIMATED VALUE BELOW THE RANGE OF THE TEST. 3/1 REDUCED FROM 31 BECAUSE OF GRASS.

TABLE 6. -- CONTINUED

PROE	PRODUCTION AREA	AREA		ER GTH	9			1/8"	SHIRLE NO	LYZER		OLOR A		
AND	ASS1F1		2.5%	50/2.5	MICRO-	ZERO	1/8"	ELON- GATION	VISIBLE	TOTAL		"	COLOR	& CARD  WASTE
ORAD I I I I I I I I I I I I I I I I I I I		SIAFLE		• • • • • • • • • • • • • • • • • • • •			- GAGE -	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	- WAS-E	- WAS -	i	, ! !	CODE	           0
NAME	CODE	32ND IN.	ż –		KDG.	MPSI	G/TEX	PCI.	PCI.	PCT.	PCT.	SLIND	0 N	PCT.
CALIFORNIA BAKERSFIELD	A ELD		ACALA SJ-2	01		01	90 PERCENT							
ΣΣΣ	31	335 355	1.09	††† †††	42 43 43	97 94 91	26 26 24	5.5	0-0	2.3	81.2 79.2 78.0	9.3 8.4 9.0	11-2 21-2 31-3	6.4 1/ 6.1 6.3
ВLУТНЕ			DELTAPINE	61		Ψ.	80 PERCENT							
LZZZZZZ	31 31 31 31 8P 52 2	33333333333333333333333333333333333333	1.06	45 443 441 381	3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	88 97 88 88 44 84	25 22 23 21 21	000000 wvooro	3	- 00000 - 10000	76.0 79.2 81.4 81.3 82.2		31-12 31-12 31-14	
BRAWLEY			DELTAPINE	61		10	00 PERCENT							
ΣΣΣΣΣ	E & & & & & & & & & & & & & & & & & & &	35 35 34 34 34	1.07	43 41 42 42	7 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	88 88 88 88	22 22 23 23 23	0.000 0.00 0.00 0.00 0.00	1.000.0	2.22.2 1.22.3 2.42.2	78.0 80.3 79.3 80.3	88888 4.8.2.2.1.	2-1-2	020000
BUTTONWILLOW	LLOW		ACALA SJ-2	0.1		1-	70 PERCENT							
ΣΣΣ	31	333 55 5	1.09 1.09 1.07	45 44 45	44 46 45	99 94 95	28 25 23	6.4 6.1 5.9	1.0 0.8 0.9	1.7	81.4 79.2 80.5	8.9 9.9	21-1 21-3 11-2	5.7 <u>1</u> 5.9 <u>1</u> 6.2 <u>1</u>
CANTUA C	CREEK		ACALA SJ-2	0.1		10	00 PERCENT							
ΣΣΣ	31	36 36 36	1.12	7 7 7 7 7	41 38 40	98 90 89	27 25 26	5.20	1.2	1.7 3.2 2.4	80.3 79.3 79.0	0.0 4.8 8.8	21-1 21-2 21-2	4.9 1J 6.6 7.2 1J
1/COTTON S	STUCK TO	1/COTTON STUCK TO PROCESSING ROLLS	G ROLLS.											

LCOTTON STUCK TO PROCESSING ROLLS. ZAREDUCED FROM 42 BECAUSE OF BARK.

	1	- q	UNITS		31.7 32.3 32.4		32.5 32.5 32.5 32.1 30.2		33.3 33.3 32.0 33.3		32.5 32.6 31.0		31.9 32.4 32.2
SLIVER	DYED	þ	PCT.		28.4 28.3 27.3		27.2 28.0 26.4 28.5 29.8 31.3		26.8 27.0 30.0 29.2 26.8		27.5 26.8 29.6		28.2 28.0 28.4
DRAWING	ED	q+	UNITS		6.0 4.6 4.3		3.7.04.8		44.0.6.4 78.0.8.5 8.8		4.2		3.8
ER	BLE	9	PCT.		88.6 92.2 91.3		91.7 92.0 94.6 92.4 92.4		91.9 91.8 91.3 92.7		91.4 91.9 90.8		91.6 94.8 92.2
COLOR OF F	1	- q - q - +	UNITS		9.0		0 8 8 8 8 0 		88888 94054		8.8		9.0
00		Rd:	PCT.		79.4 79.6 79.2		77.6 89.1 81.0 75.5 82.4 76.6		80.4 81.0 80.0 79.7 81.1		80.4 78.9 79.5		89.5 80.0 80.2
-		NO.	NO.		63 67	-	62 443 423 253		5252 252 252 253		62 61 62		74 72 70
	1	508		_	320 384 246	_	150 362 560 382 980 980	_	350 528 412 218 244	L-	358 418 478	_	490 412 314
	IB	S	i 0	PERCENT	108 118 86	PERCENT	50 100 40 76 98 362	PERCEN	50 62 76 46 30	PERCENT	120 92 136	PERCEN	15 <sup>4</sup> 170 88
LES	ANCE	50s	INDEX	90	09	80	099999	100	60 60 60 70	70	70 60 60	100	09
PROPERTI	APP	22s	INDEX		90 70 70		90 70 80 80 60 60		90 70 80 90		80 70 80		70 80 90
YARN		508			5.05		4 tr.7 tr.7 tr.7 tr.7 tr.7 tr.7 tr.7 tr.7		7. th th th th th th th th th th th th th		5.6 4.8		55.50 5.338
	ELONG	22	i		6.5		5.5.5.5.5 -7.7.8.5.		0.00 0.00 0.00 0.00 0.00		6.0		6.8 7.0 6.8
i		50s	LBS.	SJ-2	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	INE 61	41 32 34 31 31 24 21	1NE 61	35 33 34 34	SJ-2	45 43 44	SJ-2	46 45 42
	TREN	22s :	LBS.	ACALA	123 121 125	DELTAPINE	113 98 102 95 93 75	DELTAPINE	106 100 103 107	ACALA	116 123 122	ACALA	126 127 121
-	<u></u> -	STAPLE	D .N.		335		324 334 324 324 324		332 332 34 34 34 34 34		355		36 36 36
ON AREA	FICATI		)E 32ND	0	311		31 31 31 31 52 <u>1</u>		23 23 23 23 24 25 25 25 25 25 25 25 25 25 25 25 25 25	MC	31	EK	311
PRODUCTION AREA	AND CLASS	-	NAME CODE	CALIFORNIA BAKERSFIELD	ΣΣΣ	ВСУТНЕ	LA LT SP	BRAWLEY	ΣΖΣΣΣ	BUTTONWILLOW	ΣΣΣ	CANTUA CREEK	ΣΣΣ

1/REDUCED FROM 42 BECAUSE OF BARK. 2/END BREAKAGE TOO HIGH TO SPIN 50s YARN, 44s YARN SPUN AND STRENGTH ADJUSTED TO THE EQUIVALENT OF 50s. 3/THIS IS AN ESTIMATED VALUE BELOW THE RANGE OF THE TEST.

TABLE 6. -- CONTINUED

PICKER	⋖⊢	PCT.		7.3 6.1 7.2 <u>J</u> J		6.6 6.9 6.8 1		6.9 4.9 8.8		8.69 0.69		5.0 <u>11</u> 7.0 <u>17</u> 7.0 <u>17</u>		6.0 6.0 7.4 J
	COLOR	NO.		21-2 21-1 21-2		21-2 31-1 31-1		31-1 21-1 21-2		21-1 21-2 21-2		21-1 31-1 31-1		11-2 21-2 21-1
104	+	UNITS		9.0 8.6 8.9		8.6 9.0		7.8 8.0 8.3		8.2 8.6 8.4		8.7 8.2 8.4		8888
02	Rd	PCT.		80.2 80.1 79.0		80.0 79.1 77.3		80.1 81.0 78.8		81.0 78.4 79.0		80.4 78.0 77.0		80.4 80.1 81.2
🗅	OTA AST	PCT.		3.3		2.4 1.8 3.1		3.568 3.268		4.25 3.35 4.35		  		8.1.9
	-B ST	PCT.		2.2		1.1		2.1		0		0.9 2.1		1.0
1/8"	<u> </u>	PCT.		6.0 5.6 5.9		4. 6.2 6.4		5.00		6.3 5.6		4.6 5.4 5.4		5.0
BER ENGTH	- S	G/TEX	91 PERCENT	27 26 25	00 PERCENT	27 27 26	5 PERCENT	29 27 26	99 PERCENT	28 27 27	99 PERCENT	26 25 25	92 PERCENT	25 29 27
FI	ZERO GAGE	MPSI	6	96 66	10	95 97 90	8	96 96 96	6	96 96	6	99 95 95	6	99 100 99
	MAIRE I	RDG.		47 43 45		# <del>*</del>		41 41 38		40 45 41		42 33 42		42 40 37
0 0 0	50/2.5 UNIF.	PCT.		†† †† ††		45 47 45		45 46 46 46		5 4 5 4 5 4 5 4 5 4 5 7 7 7 7 7 7 7 7 7		44 47 42		† † † †
! !	2.5% : SPAN :	 	ACALA SJ-2	1.07	ACALA SJ-2	1.10	ACALA SJ-2	1.18	ACALA SJ-2	1.15	ACALA SJ-2	1.09	ACALA SJ-5	1.12
AREA	Ш	32ND IN.		34 35 35		35 36 37		37 37 36		36 36 37		36 37 36		36 36 36
PRODUCTION AREA	AND CLASSIFICALION	CODE		30 31 31		31 40 P 42		41 P 42 40		 		411		EEE
PRODU		NAME	CAL I FORN I A CORCORAN	ΣΣΣ	CORCORAN	M SLM+ SLM LT SP	DOS PALOS	SLM SLM LT SP SLM+	FIREBAUGH	ΣΣΣ	HANFORD	SLM	HANFORD	

1) COTTON STUCK TO PROCESSING ROLLS.

PRODUCTION AREA	4REA					PROPERTIE	.IES				0	OR OF	FINISHER	0	SLIVER	
AND CLASSI		STRE	ı	ELONG		APPEAR	!	Z     	! ! !			AY	i =			1 14
GRADE	STAPLE	l J	1	22s	50s	ı s		22s :	50s	NO.	Rd	q+ :	Rd	i q+		q- :
NAME CODE	32ND IN.	LBS.	LBS.	PCT.	1	DEX	INDEX	NO.	NO.		PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
CAL I FORN I A CORCORAN		ACALA	81-2				91	PERCENT								
M+ 30 M 31	355 355 355	99 122 122	33 44 43	6.0	4.9 6.4 8.8	70 70 70	09	110 124 132	558 494 482	44 61 59	79.4 79.4 79.0	90.00	91.5 91.6 90.4	4.8 4.5	27.1 26.1 28.6	32.5 33.5 31.6
CORCORAN		ACALA	sy-2				100	PERCENT								
M 31 SLM+ 40 SLM LT SP 42	35 37	110 120 125	40 45 46	5.3	5.5	80 70 70	09	108 122 152	464 272 348	57 58 70	79.8 88.8 78.7	9.8 9.8	91.3 76.0 91.7	4.7 7.3 4.3	27.9 27.1 29.3	32.1 32.8 31.6
DOS PALOS		ACALA	2-fs v				85	PERCENT								
SLM 41 SLM LT SP 42 SLM+ 40	37 37 36	139 148 132	50 55 48	6.6	5.2	80 80 80	09	90 142 100	206 246 330	83 84 78	89.0 81.0 80.0	8.6 8.9 8.9	91.6 91.5 89.5	5.4 5.4 5.4 5.4	29.4 28.7 28.0	32.6 31.6 32.2
FIREBAUGH		ACALA	1 SJ-2				66	PERCENT								
XXX LEE	36 37	133 137 131	50 50 48	6.0	5.05	80 80 110	60 70 60	136 138 122	334 318 446	84 77 76	89.4 79.9 79.3	80.8 80.0	91.6 91.7 90.8	4.6 4.7 4.8	27.5 26.6 28.2	32.6 33.0 31.9
HANFORD		ACALA	SJ-2				66	PERCENT								
SLM 411 SLM 411	36 37 36	117 130 128	4 4 4 7 7 7 7 7	6.4 6.0 6.0	4.7 4.6 4.9	90 70 80	09 09 70	122 146 88	382 354 246	61 69 71	89.3 78.6 78.4	9.9	91.4 92.1 91.6	4.3 5.0 4.4	27.2 28.5 28.3	32.5 31.6 32.0
HANFORD		ACALA	A SJ-5				92	PERCENT								
ΣΣΣ LEEE	36 36 36	119 142 135	42 53 51	6.0	5.05	70 80 60	09	106 128 70	536 432 448	62 84 95	79.6 79.3 80.6	0.08 0.02	91.5 92.4 95.0	4.6 4.3 3.2	26.9 28.6 29.1	32.8 32.2 31.7

TABLE 6. -- CONTINUED

TABLE 6. -- CONTINUED

PICKER	& CARD	- !	PCT.		6.1 6.0 7.0 <u>1</u>		5.4 1 5.6 5.3 1		6.7 6.4 6.0		5.8 6.9 1 8.5 1		5.6 1		5.9 6.2 7.3 <u>1</u> J	
! ! !	COLOR	: CODE	NO.		21-2 21-2 31-1		21-2 21-1 21-2		31-1		21-2 21-2 31-1		21-2		11-2 11-2 21-4	
OLOR O		0+	UNITS		8.3 8.4 9.4		8.0 7.6 8.6		8.6 8.3 8.4		8.3		8.8		8.4 8.7 9.1	
	1	İ	PCT.		78.4 79.3 77.0		80.4 81.0 79.3		78.0 79.0 78.7		80.0 79.4 79.0		79.2 79.4		82.0 81.3 78.0	
	TOTAL	WASIE	PCT.		3.0		2.1		2.7 2.3 2.4		1.7		2.4		2.9	
SHIRLEY	VISIBLE:		PCT.		1.2		1.00		1.4		25.0		1.3		9-1-1-6	
!	CATION		PCT.		5.09		6.0 6.0 6.0		ທູກທູ ໝູ່ໝູ່ຕ		6.3 6.3		6.0		6.375	
	1/8"	CAGE	G/TEX	PERCENT	27 26 25	PERCENT	27 26 26	PERCENT	29 25 25	PERCENT	26 27 26	PERCENT	29 <b>26</b>	PERCENT	29 28 25	
	ZERO	CAGE	MPSI	92	99 95 93	85	92 97 92	95	97 101 95	98	93 95	66	94 91	100	95 96 94	
	MICRO- NAIRE		RDG.		44 36		45 42 43		42 44 45		7 7 7 7 7 7 7 7		45 45		45 43 43	
	50/2.5		PCT.		44 45 472		94 94 94		45 45 46		45 45 45		45 47		45 46 45	
FIBER LENGT	2.5%	DE SEAN	· E	ACALA SJ-2	1.12	ACALA SJ-2	1.13	ACALA SJ-2	1.13	ACALA SJ-2	1.12	ACALA SJ-2	1.14	ACALA SJ-2	1.12	ROLLS.
REA	AT LON	SIAPLE	32ND IN.	,	38		36 36 36	•	36 36 36		36 36 36	•	36 36	·	38 36 36	PROCESSING
PRODUCTION AREA	SIFI		CODE		31 41		31		40 31 31		31 40 40		31		311	UCK TO
PRODU	AND CLAS	URAD I	NAME	CALI FORNIA LEMOORE	S	LOS BANOS	ΣΣΣ	MADERA	SLM+ N M	MARICOPA	SLM+ SLM+ SLM+	MENDOTA	ΣΣ	SHAFTER	ΣΣΣ	1 COTTON STUCK TO PROCESSING ROLLS

TABLE 6. -- CONTINUED

-			1 1	YARN	PROPERTI	I ES				3 1	COLOR OF F	INISHER	DRAWING	SLIVER	
AND CLASSIFICATION   STRENGTH	STRENGTH		ELONGATION	ATION	APPEARANCE	RANCE	NEP	s l	_ ≻q.S.	GRAY	\ \	BLEACHED		DYED	QE
'LE   2	22s : 50s	!	22s	: 50s	22s :	50s	22s :	508	NO.	Rd	q+				q-
. LBS. LBS.	LBS. LBS.		PCT.	PCT.	X	Q	0	9 9	NO.		-	PCT.		PCT.	UNITS
ACALA SJ-2	ACALA SJ-2					92	PERCENT								
36 125 41 36 125 46 35 124 45	41 46 45		6.0	4.8 4.9 4.9	80 70 70	09	122 182 146	306 900 582	66 70 63	88.9 78.5 78.1	9.8	91.2 92.0 92.2	5.52 5.02	26.3 29.1 27.5	33.6 31.5 32.8
ACALA SJ-2						85	PERCENT								
36 135 50 7 36 145 52 6 36 137 51 6	50 52 51	<b>799</b>	7.0	55.52	80 080 80	60 70 60	102 108 74	310 196 212	888	89.6 80.3 79.8	9.80	91.4 92.4 90.3	4.0 4.7 4.9	26.3 26.8 25.6	33.6 32.8 33.7
ACALA SJ-2						95	PERCENT								
36 132 46 5.6 36 128 48 6.0 36 127 45 6.1	46 48 45 45	0.00	90-	4.8 5.0 4.9	900	09	118 154 84	434 468 332	74 72 78	78.2 78.0 79.0	9999 67.0	90.2 91.9 89.2	00.00 00.00	27.4 28.0 26.6	32.8 32.2 33.1
ACALA SJ-2				٠		98	PERCENT								
36 122 45 6.7 36 127 45 6.1 36 127 45 6.5	4 4 5 5 5	000	2 - 1 - 2	5.0.	70 80 70	09	108 154 106	412 322 262	70 70 72	89.1 79.4 79.6	0008	91.4 91.6 90.3	4.3 5.5	26.8 27.0 27.0	32.8 33.4 33.0
ACALA SJ-2						66	PERCENT								
36 134 49 6 36 132 47 6	34 49 32 47	99	6.4	5.0	80	90 20	174 116	414	75	79.5	9.2	91.7	4.3	26.7	32.9
ACALA SJ-2						100	PERCENT								
35 120 43 6 36 130 47 5 36 127 46 6	43 47 46	000	6.7 5.8 6.4	5.0	70 80 90	60 70 60	114 130 106	358 232 358	70 69 73	80.0 80.3 80.0	9.4	91.7 92.0 93.2	4.4 4.7 4.1	26.4 27.4 27.7	33.4 32.6 32.3

TABLE 6. -- CONTINUED

PROD	PRODUCTION AREA	PRODUCTION AREA		FIBER LENGTH		STR	FIBER	1/8"		LYZE				
GRADE	GRADE	STAPLE	2.5% SPAN	: 50/2.5 : UNIF.	5 —	ZERO GAGE	1/8" GAGE	GATION	VISIBLE WASTE	! - ≯	Rd	q+ ::	: COLOR : CODE	83_
NAN	CODE	32ND IN.	Z	PCT.	RDG.	MPSI	G/TEX	PCT.	PCT.	PCT.	PCT.	UNITS	NO.	PCT.
CALIFORNIA STRATFORD	ΑÖ		ACALA SJ-2	5		6	98 PERCENT							
ΣΣΣ	31 31 31	36 36 36	1.11	54 44 942	39 38 43	95 95 92	26 25 25	6.1	3.1.5	2.0 2.4 2.5	79.3 80.2 80.0	8.9 9.6 8.8	21-1 11-4 21-1	5.6 <u>1</u> 6.1 <u>1</u> 5.7
STRATHMORE	ıRE		ACALA SJ-5	.5		100	O PERCENT							
SLM	3.1 4.1 4.1	36 36 36	1.12	94 44 46	43 42 40	102 97 95	27 27 23	5.8 6.0 4.0	1.1	3.2	82.0 79.0 79.0	8.2 7.8	31-1	5.6 6.3 1
VISALIA			ACALA SJ-5	.5		6	99 PERCENT							
SLM SLM LT SP	31 41 SP 42	36 36 36	1.10	442 445 445	07 38 70	103 97 91	27 26 26	5.5.5	0.0	3.3	81.4 77.4 79.3	8.0 8.2 7.8	21-1 31-2 31-1	4.6 6.4 6.5
VISALIA			ACALA SJ-5	5		6	90 PERCENT							
ΣΣΣ	31 31 31	36 36 36	1.15	8 9 9 9 1	42 46 41	101 98 99	28 28 28	000 800	1.0	1.6 2.6 2.4	80.2 81.0 78.5	8.3 7.8 8.6	21-2 21-1 21-2	5.2 5.8 1.4 1.4
WEST TEXAS SARAGOSA	Si		MCNAIR 220	0		89	9 PERCENT							
SGO SGO	51 61 <u>3</u> 61 <u>3</u>	35 35 35 35 35	1.07	54 44 44	46 43 42	89 85 86	22 22 20	50.0 20.0 20.0	2.9 4.8	4.9 6.2 6.3	73.0 72.0 71.1	9.1 7.6 8.3	41-3 41-3 41-4	8.1 10.4 10.2
1 COTTON S	TUCK TO	1) COTTON STUCK TO PROCESSING BOLLS.	S ROLLS.											

1/1 COTTON STUCK TO PROCESSING ROLLS.
2/1 REDUCED FROM 41 BECAUSE OF BARK.
3/1 REDUCED FROM 51 BECAUSE OF BARK.

TABLE 6. -- CONTINUED

PRODUCTION AREA	ON AR	- A				YARN		_				CC	LOR OF F	INISHER	DRAWING	~	
AND	I F I CA		I I		ELONGA		APPEA	!	I Z			5	i —-	BLEA		70	
GRADE		STAPLE	1 ··· 1	508	22s	50s	22s	50s	22s :	50s	0.5	I	q+	Rd	q+	Rd	'
NAME CODE	!	32ND IN.	LBS.	LBS.	PCT.	PCT.	ă	1 Z	. ON	0		PCT.	TS	PCT.	UNITS	PCT.	UNITS
CALIFORNIA STRATFORD			ACALA SJ-2	SJ-2				98 P	PERCENT								
ΣΣΣ	3113	36 36 36	127 126 127	9th 9th	5.7	4.7 5.1 5.1	70 70 70	09	88 108 74	302 436 304	75 66 71	88.6 79.7 80.0	10.0	90.9 92.7 90.9	4.6 4.1 4.7	27.8 28.8 31.1	32.3 32.2 29.5
STRATHMORE			ACALA SJ-5	SJ-5				100 P	PERCENT								
SLM	31 41 41	36 36 36	130 138 138	45 51 51	6.538	55.00	100 70 80	09	156 168 240	468 414 500	67 84 82	80.2 88.4 78.9	8.8	92.2 91.6 92.8	4.6 4.7 4.5	28.2 28.3 27.5	32.2 31.9 32.6
VISALIA			ACALA SJ-5	SJ-5				99 P	PERCENT								
SLM SLM LT SP	31 41 42	36 36 36	128 137 134	48 51 50	666	505	80 70 70	09 09 09	122 162 184	466 422 426	69 79 75	89.7 78.4 79.2	8.8	90.2 93.3 91.0	5.3 4.3	27.1 27.5 27.2	32.5 32.5 33.2
VISALIA			ACALA SJ-5	SJ-5				90 P	PERCENT								
ΣΣΣ	311	36 36 36	147 144 144	525	6.5	5.3	80 80 70	70 60 60	134 130 180	286 296 396	93 88 80	89.2 80.2 79.7	9.88	90.8 91.8 91.3	44.5	27.1 29.4 26.7	33.0 31.2 32.6
WEST TEXAS SARAGOSA			MCNAIR	3 2 2 0				89 P	PERCENT								
SG0 SG0	51 61 <u>1</u> 1 61 <u>2</u> 4	352	108 107 105	37 37 35	5.0	4.7 4.4 4.4	80 80 80	09 09 60	09 92 1111	236 470 284	60 57 53	76.0 75.5 69.0	99.3	93.5 92.6 91.2	4.0 4.7 4.5	27.2 28.5 29.4	32.7 32.0 31.3
JREDUCED FRO	FROM 41 FROM 51	BECAUSE BECAUSE	OF BARK.														

TABLE 7.--COTTON: AMERICAN UPLAND LONG STAPLE FIBER AND YARN QUALITY CHARACTERISTICS BY PRODUCTION AREA AND CLASSIFICATION, CROP OF 1980.

PCT. PCT. 3.4 71.3 2.9 73.0 3.7 63.3	PCT. 71.3 73.0 63.3	71.3 73.0 63.3 69.3 65.2 68.4	PCT. 33.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.3.	. mom mout main			0.01 10.00 1
3.4			P	71.3 63.3 65.2 68.4 73.8 73.8	71.3 73.0 63.3 65.2 68.4 70.4 62.5	71.3 73.0 63.3 65.2 68.2 73.4 73.5 71.1 71.0	71.3 73.0 63.3 65.2 68.4 70.4 62.5 71.1
22.6	2.6 2.4 2.9 2.9 3.7	0 e 7 3 4 t 6	0 0 9 7 3 3 4 tr	8 1 8 3 4 4 8	8 1 9 3 4 t 0 9 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	50t 8 <b>-1</b> 0 06-7 3456	
PERCENT 23 5.5 22 5.8 23 5.3	PERCENT 23 22 23 PERCENT	PERCENT 23 22 23 23 PERCENT 23 22	PERCENT 23 23 23 PERCENT 23 22 23	PERCENT 23 22 23 23 23 23 22 23 22 23 22 23 22	PERCENT 23 22 23 23 22 23 22 23 22 23 22 23 22 23 29	PERCENT 23 23 23 23 23 23 23 22 23 22 23 22 23 22 23 27 27 27 27 27 25	PERCENT 23 22 23 23 22 23 23 22 23 22 23 22 23 22 23 22 23 24 27 27 25 25 25 25
100 P 95 91 92	100	100	95	95	95 99 80	90 80	95 95 80 89
0 14 14 14 14 14 14 14 14 14	t t t t t t t t t t t t t t t t t t t	7	## ### ### ### ### ### #### #### ######	## ### ### ###########################	33334 44 4433 444 444 444	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	44 43 44 43 44 44 44 44 44 44 44 44 43 43
33 1.05 34 1.02 34 1.04							
LT SP 42 LT SP 42 SP 43	SP SP	SP SP SP SP SP SP SP SP SP SP SP SP SP S	SP SP SP SP SP SP SP SP SP SP SP SP SP S	SP SP SP SP SP SP SP SP SP SP SP SP SP S	SP (0L1 SP SP SP SP SP SP SP SP SP SP SP SP SP	8	LT SP CAROLI CAR
	95	COKER 310  1.06  43  39  91  23  1.10  44  42  87  22  1.05  43  44  87  23	COKER 310  1.06  43  39  91  23  1.10  44  42  87  22  1.05  43  44  87  23  COKER 310	COKER 310  1.06  43  39  91  23  1.10  44  42  87  22  23  1.05  43  44  42  87  23  23  1.05  44  44  87  22  23  1.05  44  44  87  22  23  1.08  44  42  90  PERCENT  1.08  44  42  90  23  1.09  23  1.09  23  23	COKER 310  1.06  43  39  91  23  1.10  442  87  23  444  42  90  PERCENT  COKER 310  1.08  444  42  90  22  1.08  43  43  90  22  1.09  43  43  90  23  1.04  442  90  22  23  23  24  26  27  28  28  28  28  28	COKER 310  1.06  4.3  3.9  1.10  4.4  4.2  8.7  2.2  1.05  4.4  4.4  1.08  4.4  1.09  4.4  4.2  90  PERCENT  90  PERCENT  90  91  92  93  93  94  1.04  42  90  91  92  93  93  94  94  90  93  93  94  94  95  95  95  95  95  95  95  95	COKER 310  1.06  4.3  4.4  4.2  8.7  2.3  1.10  4.4  4.2  8.7  2.3  2.3  1.05  4.4  4.2  9.0  PERCENT  COKER 310  COKER 310  COKER 310  COKER 310  COKER 310  ACALA 1517-75  89 PERCENT  89 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT  80 PERCENT

TABLE 7. -- CONTINUED

PRODUCTION AREA					ARN	PROPERTIES	ES				S	COLOR OF FI	FINISHER	SHER DRAWING	SLIVER	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
AND CLASSIFICATION		STRENGTH	TH T	ELONG	i - i	APPEARANCE	NCE	NEPS		   >d	1		ВСЕАСНЕВ	HED	1	
••	STAPLE	22s :		228 :	508	228 :	50s l	228 :	50s	NO.	Rd :	q+ +	Rd :	+ q+	Rd	q-:
l I	32ND IN.	LBS.	LBS.	PCT.	PC	X	INDEX	. ON	NO.	. ON	PCT.	UNITS	PCT.	UNITS	PCT.	UNITS
GEORG1A MAD1SON		COKER	310				100 P	PERCENT								
LT SP 42 LT SP 42 SP 43	33 33 34	82 83	29 24 26	4.24	4.7 4.5 4.0	120 110 100	70 80 70	8 16 22	128 108 94	0 ty 0 ty 17 th	73.9 69.3 66.8	10.3 10.3 10.8	90.3 90.0 90.1	5.7 5.4 6.2	27.4 27.0 28.8	32.6 32.6 31.1
CAROLINA		COKER 310	310				95 P	PERCENT								
LT SP 42 LT SP 52 LT SP 42	34 35 34	105 94 84	33 30 28	6.0 5.7 4.7	4.7 4.6 3.9	110 100 100	70 60 80	14 28 38	266 134 150	55 54 46	73.0 68.8 70.2	10.2 9.6 9.2	91.9	4.9 4.9	27.9 30.7 29.0	32.3 30.3 31.8
SOUTH CAROLINA CLIO		COKER 310	310				90 P	PERCENT								
41 LT SP 42 LT SP 52	34 33 33	106 93 77	34 28 27 1J	6.1 5.5 4.6	4.5 4.2 4.0	120 110 80	80 70 60	36 18 50	194 274 260	53 44 41	75.2 69.1 65.8	9.0	91.4 90.3 88.9	4.4 4.4	28.4 28.4 29.2	32.1
MISSOUR! KEWANEE		COKER	310				80 P	PERCENT								
41 LT SP 42 51	36 36 36	121 95 100	42 29 31	6.1 5.8 6.0	4.5 4.5	130 130 120	90 80 90	# 27 27	100 58 124	70 449 51	76.3 73.7 74.4	10.0 9.7 9.1	90.5 90.5 90.8	4.6 4.7	26.1 27.1 2 <b>6.8</b>	33.3 32.6 32.9
WEST TEXAS EL PASO		ACALA	ACALA 1517-75	10			89 P	PERCENT								
31	37	139	52 52	6.3	5.4	110	90	32 30	102 194	95	88.6	8.7	91.9	4.8 4.9	27.6	32.6
JEND BREAKAGE TOO HIGH TO	T HOIH OC		SPIN 50s YARN.	445 YARN		SPUN AND 8	STRENGT	STRENGTH ADJUSTED TO	TED TO	THE	EQUIVALENT	of 50s.				

TABLE 7A.--COTTON: AMERICAN UPLAND LONG STAPLE COMBED YARN QUALITY CHARACTERISTICS BY PRODUCTION AREA AND CLASSIFICATION, CROP OF 1980.

PRODUCTION AREA	\REA	COMBER	YARN SKEI	zi	STRENGTH	YARN EL	ELONGATION	\ \ \	YARN APPEARANCE	ANCE	YARN	NEPS
= :	AND CLASSIFICATION		~	0.8	: AVERAGE : BREAK : FACTOR	228	508	22s		AVERAGE	22 s	508
CODE	32ND IN.	PCT.	LBS.	LBS.	. O V	PCT.	PCT.	INDEX	INDEX	INDEX	.0N	NO.
		COKER 310			100	PERCENT						
45 42 43	33 33 34	20.1 20.6 20.1	122 110 111	40 37 37	2342 2135 2146	6.3 5.3	5.0 4.2	130 130	110 120 120	120 125 125	20 18 42	270 196 124
NORTH CAROLINA DUNN		COKER 310			96	PERCENT						
45 45 45 45 45	34 35 34	17.3 18.3 19.0	128 118 118	45 43 39	2533 2373 2273	6.5	5.5	130 120 130	100 100 90	115	332 382 383	236 126 372
SOUTH CAROLINA CLIO		COKER 310			06	PERCENT						
41 42 52	333 333 333	18.7 21.7 20.6	130 121 108	45 41 36	2555 2356 2088	6.7 6.3 5.6	5.2 4.9 4.1	130 130 120	110 120 80	120 125 100	28 16 42	184 228 420
		COKER 310			80	PERCENT						
41 SP 42 51	36 36 36	16.1 18.3 18.4	141 122 126	51 42 46	2826 2392 2536	6.7 6.4 6.4	70.00 20.00	130 130 130	130 130 110	130 130 120	24 18 16	104 52 174
		ACALA 1517-75	-75		89	PERCENT						
31 50	37	16.3 14.2	159 158	58 58	3199 3188	6.5	5.4	130	120 10 <b>0</b>	125 115	16 32	118 186

TABLE 8. -- COTTON: AMERICAN PIMA EXTRA LONG STAPLE FIBER AND YARN QUALITY CHARACTERISTICS BY PRODUCTION AREA AND CLASSIFICATION, CROP OF 1980.

	COMBER	WASTE	PCT.		15.4 14.2 14.8		15.8 14.9 15.5		14.6 14.5 15.6		15.1		16.3 15.1 15.9
	% CARD	WASTE	PCT.		6.5		8.8 7.4 8.3		6.9 6.7 8.0		9.0		8.0 7.4 8.2
		COLORI	NO.		1 1 1		1 1 1		1 1 1		1 1 1		1 1 1
COLOR OF	AW 310CF	q <sub>+</sub>	UNITS		10.7 9.8 10.9		11.2		11.4 10.9 11.0		11.7		10.9
	1 1 1 1 1 1 1	Rd :	PCT.		72.4 72.0 72.0		69.4 70.0 70.0		70.0 69.0 70.0		69.0 68.3 70.0		69.3 70.3 71.1
SHIRLEY ANALYZER		: TOTAL : WASTE	PCT.		3.4 3.4 3.4		8.0 5.0 5.0		1.9 2.6 2.9		3.7 4.3 5.2		2.6 4.4 3.5
SHIRLEY		VISIBLE WASTE	PCT.		1.3		1.5		0.8		1.9		0.1.0
1,01		<del>-</del>	PCT.	PERCENT	6.8 6.1 7.2	PERCENT	8.0 7.0 6.9	PERCENT	7.5	PERCENT	7.3 7.4 6.9	PERCENT	7.6 7.6 7.4
FIBER		: 1/8"   : GAGE	G/TEX	100 PE	35 38 37	100 PE	37 36 35	100 PE	3355 3355	100 PE	33 33 34	100 PE	36 35 35
H H	0 1	ZERO GAGE	MPSI		102 112 104		101 101 109		98 104 105		95 104 105		102 97 103
	MICRO-	NAIRE	RDG.		42 42 39		39 42 42		37 36 34		35 35		35 36 36
		COEFF.			29 26 29		31 30 29	,	31 30 31		35 31 32		31 32 31
ARRAY	,	QUARTILE: LENGTH :		PIMA S-5	1.46 1.51 1.50	PIMA S-5	1.54 1.54 1.55	PIMA S-5	1.55 1.57 1.54	PIMA S-5	1.54 1.54 1.54	PIMA S-5	1.53
λΕΑ		STAPLE	32ND IN.		9 17 9 17 9		46 48 48		94 94 94		9 4 7 8 9 7 7 8		9 9 9 9 7
PRODUCTION AREA	AND CLASSIFICATION	GRADE	ı	WEST ARIZONA PHOENIX	ოოო	SAFFORD	ттт	NEW MEXICO MESQUITE	ოოო	WEST TEXAS ANTHONY	ਸ <b>ਸ</b> ਸ	FABENS	ಸಕಣ

UNITS 30.7 31.4 31.3 30.8 30.7 30.1 30.9 29.5 32.1 30.7 29.8 29.6 29.9 30.5 30.3 Rd : -b DYED PCT. 29.0 27.9 28.0 28.2 28.6 29.2 28.8 30.0 27.7 28.4 29.3 29.0 30.1 28.4 29.0 COLOR OF FINISHER DRAWING SLIVER UNITS 6.8 6.1 6.7 6.1 7.1 6.8 6.5 5.8 5.0 6.1 7.2 6.7 6.8 Rd : +b BLEACHED PCT. 91.9 90.2 91.0 91.2 91.3 90.0 90.1 90.8 89.7 89.9 91.8 90.4 90.7 90.7 89.6 PCT. · UNITS 11.5 10.8 11.6 12.1 11.7 12.2 12.2 28:11 Rd: +b GRAY 74.2 69.4 73.9 71.5 72.0 66.9 71.6 71.4 66.3 70.6 71.2 6**5**.5 71.2 71.9 67.9 80s 148 140 604 . NO 102 190 168 328 200 380 192 134 292 174 292 402 50s: NEPS 54 66 152 . 0 N 114 94 66 34 52 142 100 PERCENT 100 PERCENT 56 40 96 100 PERCENT 100 PERCENT 100 PERCENT 102 74 94 ELONGATION | APPEARANCE | 50s: 80s | 50s: 80s | PCT. INDEX INDEX YARN PROPERTIES 130 120 120 110 120 110 110 130 110 100 120 110 100 130 130 130 120 120 120 130 120 120 110 120 120 130 5.1 5.8 4.8 5.1 5.1 4.9  $\sigma_{\sigma,\sigma}$ 5.5.7 50.5 20.5 20.5 PCI. 5.7 5.7 6.0 5.8 5.8 6.3 6.2 5.8 6.4 6.0 6.0 5.9 6.4 80s LBS. 34 36 36 35 37 40 38 35 34 34 36 STRENGTH 50s : S-5 S-5 PIMA S-5 PIMA S-5 PIMA S-5 PIMA LBS. PIMA 70 74 71 67 68 68 67 68 65 69 69 67 67 68 68 GRADE : STAPLE 32ND IN. 46 46 46 46 46 46 146 146 148 46 46 46 456 AND CLASSIFICATION PRODUCTION AREA NEW MEXICO MESQUITE WEST TEXAS ANTHONY ARIZONA SAFFORD FABENS NAME ოოო 4 4 8 444 433 m m m

TABLE 8. -- CONTINUED

TABLE 9.--COTTON: MEANS AND STANDARD DEVIATIONS OF TEST MEASUREMENTS PERFORMED ON 428 SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

		HORT SAMPLES	295 N STAPLE	295 MEDIUM STAPLE SAMPLES	14 STAPLE	LONG	15 EXT STAPLE	15 EXTRA LONG STAPLE SAMPLES
	MEAN	STANDARD   DEVIATION	MEAN	STANDARD   DEVIATION	MEAN	STANDARD   DEVIATION	MEAN	STANDARD: DEVIATION
· ~							1 1 1 1 1 1 1 1	 
CLASSIFICATION: GRADE INDEX STAPLE 32ND IN.	31.1	6.5	92.6 34.3	6.9	88.6 34.6	5.4	46.1	0.5
FIBER LENGTH: 2.5% SPAN IN. 50/2.5 UNIF PCT. UPPER QUARTILE LENGTH IN. COEFF. OF VAR PCT.	0.978	0.034 1.5	1.075	0.046	1.086 43.9	0.052	1.395 45.9 1.530 30.5	0.023 1.8 0.027 2.0
MICRONAIRE RDG.	41.5	3.2	44.1	ħ·ħ	43.4	3.3	37.7	3.4
FIBER STRENGTH: ZERO GAGE MPSI 1/8" GAGE G/TEX ELONGATION (1/8") PCT.	87.6 21.4 6.18	14.3 1.14 0.67	90.9 23.6 5.81	5.1 2.0 0.60	90.8 23.8 5.79	2.4 1.7 0.37	102.8 35.1 7.21	4.3 1.5 0.45
SHIRLEY ANALYZER: VISIBLE WASTE PCT. TOTAL WASTE PCT.	2.98 4.59	0.95	2.06	1.00	2.32	0.61	1.47	0.52
COLOR OF RAW STOCK: GRAYNESS (Rd) PCT. YELLOWNESS (+b) UNITS	72.78	2.75	75.42	4.36 0.75	70.57	11.63 0.80	70.19	1.20

TABLE 9. -- CONTINUED

URING WASTE:  WASTE
SPINNING POTENTIAL NO. 43.8 7.9 53.3

TABLE 9. -- CONTINUED

	1				STAPL	LONG	1	LONG
	MEAN	STANDARD   DEVIATION	MEAN	STANDARD   DEVIATION	MEAN	STANDARD :	 MEAN	: STANDARD : DEVIATION
COMBED YARN DATA:								
YARN SKEIN STRENGTH: 22s (27 TEX) LBS. 50s (12 TEX) LBS. 80s (7.4 TEX) LBS.					126.6	16.0	68.1	2.2
YARN ELONGATION: 228 (27 TEX) PCT. 508 (12 TEX) PCT. 808 (7.4 TEX) PCT.					6.33	0.52	5.88	0.39
YARN APPEARANCE: 22s (27 TEX) INDEX 50s (12 TEX) INDEX 80s (7.4 TEX) INDEX					128.6	3.6	121.3	7.4
YARN NEPS: 22s (27 TEX) NO. 50s (12 TEX) NO. 80s (7.4 TEX) NO.					26.6	9.7	82.4 249.7	35.3 134.9
COLOR OF FINISHER DRAWING SLIVER:								
GRAY: REFLECTANCE (Rd) PCT. YELLOWNESS (+b) UNITS	74.20 10.31	5.10	77.65	5.13	72.64 9.61	5.59	70.37	2.63
BLEACHED: REFLECTANCE (Rd) PCT. YELLOWNESS (+b) UNITS	90.91	1.27	91.20	1.69	90.66 4.90	0.79	90.62	0.72
DYED: REFLECTANCE (Rd) PCT. BLUENESS (-b) UNITS	28.10	1.21	27.53 32.51	1.21	28.21	1.36	28.77	0.71

TABLE 10.--COTTON: SIMPLE CORRELATION ANALYSIS FOR FIBER AND PROCESSING TEST RESULTS FROM 104 SHORT STAPLE SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

	CLASSI	FIC	- U	! !		FIB		1/8"	SHIF	ZZ	COLO	105	PICKER
- FB	GRAD	STAPLE	2.5% SPAN	1 % = N	J <del></del>	ZERO GAGE	-1- GA -1		VISIB	OTA	Rd	I Q I + I	& CAK WASTE
					SIMPLE	4	CORRELATION C	COEFFICIEN	ENTS (r's)				
GRADE INDEX STAPLE 32ND IN.	(+1.00	30	23	+.27	+.13	+.39 44	21	28	67	64	+.62	04	55
2.5% SPAN IN. 20/2.5 UNIF PCT. MICRONALIRE RDG.	23 +.27 +.13	+.73	+1.00	+1.00	32 +.18 +1.00	39 +.28 +.42	+.57	+,33	+.25	+.30	+.05+.34	35 +.02 +.19	+.02 +.05
ZERO GAGE MPSI 1/8" GAGE G/TEX ELONGATION (1/8") - PCT.	+.39 21	44 +.57 +.39	39 +.57 +.33	+.28 +.17 05	+.42 19 38	+1.00	22 +1.00 +.32	+.32 +1.00	+.28 +.18	37 +.30 +.32	+.17 +.10 04	+ .15	16 +. 10 +. 14
VISIBLE WASTE PCT. TOTAL WASTE PCT.	67 64	+.31	+.25	13	1.12	21	+.28	+.18	+1.00	+.90	28	13	+.78
GRAYNESS (Rd) PCT. YELLOWNESS (+b) UNITS	+.62	+.01	+.05	+.34	15	+.17	+.10	04 18	28	33	+1.00	38	32
CARD WASTE PCT.	55	+.04	+.02	90	+.05	16	+.10	+.14	+.78	+.78	32	+0.4	+1.00
8s (74 TEX) LBS. 22s (27 TEX) LBS. VADN CLOMCATION.	18	+.75	+.67	04	51	39	+.58	+.39	+.19	+.25	+.24 +.21	42	14
8s (74 TEX) PCT. 22s (27 TEX) PCT.	23	+.56	4°,49 +,48	21	56	65	+.31	+.59	+.12	+.23	+.02	28	07
2 (7 s	+.14	+.12	+.08	+.19	+.15	+.13	+.13	07	09	1.14	+.18	30 24	06
SPINNING POTENTIAL NO. SPINNING POTENTIAL NO. COLOR OF FINISHER DRAWING SLIVER:	+.02	1.23	06 14 +.78	+.11	1.07	+.11 +.16 49	+.56	+.04		+.28	+.05	+.09	+.02
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	+.35	+.01	+.12	+.34	25	+.10	+.08	+.02	+.00	17	.+.61	41 +. 74	+.21
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	+.26	+.04	+.22	+.35	36	00 +.16	+.09	+.02	09 +.03	+.10	+.47	14	+.25
REFLECTANCE (Rd) - PCT. BLUENESS (-b) UNITS	27	+.42	+.32	+ 18	+.13	30	+.25	+.30	+.28	+.28	+.04	36	+.09

1 ~	1	- q -	1	+.28	24 +.18 +.13	+.24	28	+.08	14	28	- 33	02	+ + . 10	0 <sup>1</sup> 4	+.14	+1.00
C SLIV		Rd	1 1 1 1 1 1 1	27	+.32	30 +.25 +.30	+ . 28	+.04	+.09	+.40	+.41	02	09 26 +.43	+.17	+.03	+1.00
13	1	!	1	22	1.18	+.16	+.03	41 +.28	+.25	37	. 23	+.03	+ . 03 31	49	62	06
FINISHE	BLEACHED	Rd		+.26	+ + . 22	00 +.09 +.02	09	+.47	19	+.28	+.14+.16	+.15	+.15 +.04 +.25	+.61	+1.00	+.03
COLOR		i q	s)	31 24	15 08 +.17	+.08 20 19	+.04	54	+.21	1.35	21	26	+.03	45	16	26
	GR	Rd I	) SLNI	+.35	+.12+.34	+.10 +.08 +.02	00	+.61	18	+.23	+.07	+.29	+.05	+1.00	+.61	+.17
1 1 1 1 1		NO.	COEFFICI	30	+.78	49 +.56 +.43	+.21	+.09	07	+.90	+.70	+.10	1 <sup>1</sup> 4 29 +1.00	+.14	+.25	+.43
				+.08	14 +.05 +.10	+.16	09	08	+. 1	37	29	13	+.61	19 +.26	+.04	26
		88		+.02	06 +.11 07	+.11	01	+.05	+.02	15	17	17	+1.00 +.61 14	+.05	+.15	09 +.10
ES	EARANCE		SIMPLE	+.09	06 +.23 +.14	+.16	17	+.14	18	+.08	11	+.31	03 21 +.07	+.12	+.01	13
ROPE	AP	8	1	+.14	+.08 +.19 +.15	+.13	09	+.18	06	+.08	06	+1.00	17 13 +.10	+.29	+.15	.02
YARN	ELONGATION	22 s	1	25	+.48	+.35	+.14	+.06	1.1	+.74	+.91	1.11	1.07	+.06	+.16	+.34
i		1		+.56	+.49	+.31	+.12	+.02	07	+.75	+1.00 +.91	06	17 29 +.70	+.07	+.11/4	+.41
	STRENGTH	22s	1 1	20	+.68	31 +.64 +.30	+.20	+.21	13	+.93	+.65	+.10	+.88	+.20	+.25	+.40
	STRE	] [		18	+.67	+ + 1 39	+.19	+.24	114	+1.00	+.75	+.08	15 37 +.90	+.23	+.28	+.40
	TEM TEM			GRADE INDEX STAPLE 32ND IN.	2.5% SPAN IN. 2.5% SPAN IN. 50/2.5 UNIF PCT. MICRONAIRE SIDENCTI.	ZERO GAGE MPSI 1/8" GAGE G/TEX ELONGATION (1/8") - PCT.	VISIBLE WASTE PCT. TOTAL WASTE PCT.	GRAYNESS (Rd) PCT. YELLOWNESS (+b) UNITS	CARD WASTE PCT.	8s (74 TEX) LBS. 22s (27 TEX) LBS. VARN ELONGATION.	8s (74 TEX) PCT. 22s (27 TEX) PCT. VARN ADBEARME.	22 (27 TEX) INDEX	SPINNING POTENTIAL NO. COLOR OF FINISHER	REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS RIFACHED:	REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	REFLECTANCE (Rd) - PCT. BLUENESS (-b) UNITS

TABLE 10. -- CONTINUED

TABLE 11.--COTTON: SIMPLE CORRELATION ANALYSIS FOR FIBER AND PROCESSING TEST RESULTS FROM 295 MEDIUM STAPLE SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

PICKER	& CARD WASTE		62	40 18 14	21 44 13	+.66	48	+1.00	49 48	35	+.07	02 46 46	43	15	+.22
COLOR OF   RAW STOCK			24 58	+.21	18 32 01	+.15	+1.00	+.21	33	12	+.25	19 24 38	38 +.83	16	+.09
1	Rd		+.83	+.25	+.06 +.41 +.25	53 48	+1.00	48	4.49 +.48	+.40	39	+.18 +.09 +.43	+.64	+.31	+.04
NALYZEI NT	TOTA		68	28	21	+.85	48	+.73	28	13	+.01	++.05	35	+ .11	+.27
SHIF	VISIBL WASTE	ENTS (r's)	71	22 01 12	14	+1.00	53	+.66	23	09	+ +	+.02	31	+.12	+.20
1/8#		COEFFICIEN	+ 14	07 +.03 26	45 +.11 +1.00	07	+.25	13	++	+.52+.46	25	+.05	+.09	+.12	+.26
1	1/8" GAGE		+.40	+.64 +.38 +.04	+.54 +1.00 +.11	25	+.41	44	+.81	+.38	21	+.40	÷.33 28	+.05	07
FIB	RO GE	CORRELATION	+.13	+.47 +.17 +.30	+1.00 +.54 45	14	+.06	21	+ 4.43	07	+.03	+.19 +.08 +.40	+.11	12	24 +.18
	2 W	- SIMPLE	+.00 +.41	+.33	+.30 +.04 26	12	14	14	13	20	+.38	+ . 00	11 24	08	54 +.50
ER STH	. 50/2.5  : UNIF.	1	+.19	+.09 +1.00 12	+.17 +.38 +.03	01	+.16	18	+.48	+.31	+.08	†††** ††*** †***	+.18	01 +.10	03
<u></u>	2.5% SPAN		+.28	+1.00 +.09 +.33	74. + +9. + 07	22	+.25	04	+.67 +.67	+.34	11	+.36 +.26 +.71	+.27	+.09	29
	STAP		+.30	+.91 +.05 +.41	+.51	26	+.27	38	+.60	+.22	09	+ + . 26	+.27	+.05	30
CLASSIF	RADE	 	+1.00	+.28 +.19 +.00	+.13 +.40 +.14	71	+.83	62	+.45	+.30	20	+ + 03	+.56	+.26 26	+.27
	1 E S -		GRADE 1NDEX STAPLE 32ND IN.	2.5% SPAN IN. 2.5% SPAN IN. 50/2.5 UNIF PCT. MICRONAIRE RDG.	ZERO GAGE MPSI 1/8" GAGE G/TEX ELONGATION (1/8") - PCT.	VISIBLE WASTE PCT. TOTAL WASTE PCT. COLOR OF RAW STOCK:	( q	CARD WASTE PCT.	22s (27 TEX) LBS. 50s (12 TEX) LBS. VARN ELONGATION:	22s (27 TEX) PCT. 50s (12 TEX) PCT. VARN APPEARANCE.	22s (27 TEX) INDEX 50s (12 TEX) INDEX VARN NEDS.	SPINNING POTENTIAL NO. SPINNING POTENTIAL NO. COLOR OF FINISHER DRAWING SLIVER:	REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS RIFACHEN.	REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	REFLECTANCE (Rd)PCT. BLUENESS (-b) UNITS

TABLE 11. -- CONTINUED

	1			YARN	PROPERTI	i (u)	1		1		JR -	INISHER	<u>۶</u>	NG SLIVE	8
TEW - LEW		NGTH	ELO	ATION		ARANCE	Z	1 (0				BLEACHED	HED		
	22s	508	228	508		22s : 50s		20		:	q +	Rd :	q+	Rd :	q-
						SIMPLE	CORREL	ATION C	COEFFICIENTS	NTS (r	- (s				1.1
GRADE 1NDEX STAPLE 32ND IN.	+.45	11 th th	+.30	+.34	20	06	+.02	+.03	+.38	+.56	34	+.26	26	17	+.27
2.5% SPAN IN. 2.5% SPAN IN. 50/2.5 UNIF PCT. MICRONAIRE RDC.	+.67	+.67	+.34+.31	+.32+.34	+.08	13 +.22 +.24	+.36 +.04 15	+.26	+.71	+.27	50 +.22 24	+.09	26 +.10 05	29 03 54	+.37
ZERO GAGE MPSI 1/8" GAGE G/TEX ELONGATION (1/8") - PCT.	+.43 +.81 +.12	+.44	07 +.38 +.52	+.06 +.49 +.46	+.03	00 08 17	+.19 +.40 +.05	+.08 +.11 +.06	+.40	+.11 +.33 +.09	14 28 +.02	12 +.05 +.12	+.01	24 07 +.26	+ + 18
VISIBLE WASTE PCT. TOTAL WASTE PCT.	- 23	25	09	19	+.11	+.11	+.02	03 +.02	19	31	+.24	1.12	+.19	+.20	27
GRAYNESS (Rd) PCT. YELLOWNESS (+b) UNITS	+.49	+.48	+.40	+.45	39	15	+.18	+.09	+.43	+.64	= .39 + .83	+.31	28 +.35	+.004	+.07
CARD WASTE PCT.	6ħ	48	35	36	+.07	+.02	02	+.02	94	43	+.30	15	+,22	+,22	28
LBS.	+1.00	+.98	+.56	+.58	25	08	+.37	+.06	+.96	+.43	29	+.16	18	+.01	+.04
22s (27 TEX) PCT. 50s (12 TEX) PCT. VARN APPEARANCE.	+.56	+.52	+1.00	+.77 +1.00	07	04	+.13	+.03	+.54 +.54	+.29	13	+.19	11	+.04	+.01
22s (27 TEX) INDEX 50s (12 TEX) INDEX VADN NEDS.	25	29	07	20	+1.00	+.54	45	41	25	29	+.17	13	+.22	38	+.31
SPINNING POTENTIAL NO. SPINNING POTENTIAL NO. COLOR OF FINISHER	+.37 +.06 +.96	+.40	+.13 +.03 +.54	+.23 +.04 +.54	45 41 25	33	+1.00 +.56 +.35 +.35	+.56 +1.00 +.07	+.35 +.07 +1.00	+.14 +.04 +.42		04 +.01 +.18	06 13 21	+.14 +.03 +.01	11 +.02 +.05
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	+.43	+.43	+.29	+.29	29	05	+.14	+.04	+.42	+1.00	36	+.14	13 +.43	05 +.14	+.13
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	+.16	+.16	+.19	+.13	13	02	04	+.01	+.18	+.14	17	+1.00	61	+.06	+.05
REFLECTANCE (Rd) - PCT. BLUENESS (-b) UNITS	+.01	+.04	+.014	+.12	+.31	26 +.18	+.12	+.03	+.01	+.13	+.14	+.06	+.01	+1.00	+1.00

TABLE 12.--COTTON: SIMPLE CORRELATION ANALYSIS FOR FIBER AND PROCESSING TEST RESULTS ON CARDED YARN FROM 14 LONG STAPLE SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

PICKER	. CAR ASTE		77 44	47 36 01	19	+.83	72	+1.00	59	61	67 46	+ 40 + 43	70	71	+,25
0 F	+		54	63 21 +.34	+.01	09	41	90	55	39	+.06	43 18 60	46	19	+.10
COLO	Rd		+.87	+.65	+ + 555	53	+1.00	72	+.77	4.79 +.77	+.70 +.64	25 20 +.71	+.75	+.54	32
ALYZER NT	TOTA		71	32	08	+.84	61	+.90	45	-, 44 -, 45	56 44	+.41	. 60 -	63	+.32
SHIRLEY NONL	VISIBL	TS (r's)	71	21 23 +.10	+.06 10 45	+1.00 +.84	53	+.83	45	41 34	42	+.14	48	74 11	+.06
1/8"	ELON- GATION	COEFFICIENT	+.52	+.79 +.66 31	08 +.47 +1.00	45	+.80	59	+.83	+.91	+.60	+	+.48	+.57	+.11
ŀ	I X A	CORRELATION C	+.55	+.80 +.40 +.15	+.23 +1.00 +.47	10	+.55	35	+.72 +.73	+.51	+.48	27 38 +.69	+.70	+.24	42
FIB	ERO AGE	1	+.20	+.02 04 +.27	+1.00 +.23 08	+.06	+.25	19	02	+.15	9ħ°+	31	+.36	+.07	65
	AIRE	SIMPLE	12	21 +.03 +1.00	+.27 +.15 31	+.10	24 +.34	01	9ħ	36	+.28	40 65 46	+.33	37	+.41
ER GTH	50/2 UNI	 	+.17	+.63 +1.00 +.03	99°+	23	+.34	36	+.53	+.57	+.45	02 24 +.59	+.18	+.19	+,31
	2.5% SPAN	1	+.49	+1.00 +.63 21	+.02 +.80 +.79	21	+.65	74	+.92 +.91	+.81 +.80	+.47	04 26 +.92	+.69	+.53	+.04
	STAPLE	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	+.40	+.95	+.04 +.80 +.76	22	+.55	44	+.82	+.73	+.48	11 43 +.82	+.62	+.50	02
CLASSIF	1		+1.00	+.49	+.20 +.55 +.52	-:71	+.87	77	+.68 +.64	+.55	+.58	17 18 +.59	+.84	+.57	45
	ITEM	1	SRADE 1NDEX	2.5% SPAN IN. 50/2.5 UNIF RDG. MICRONATER RDG.	ZERO GAGE MPSI ZERO GAGE G/TEX ELONGATION (1/8") - PCT.	VISIBLE WASTE PCT. TOTAL WASTE PCT.	GRAYNESS (Rd) PCT. YELLOWNESS (+b) UNITS	CARD WASTE PCT.	228 (27 TEX) LBS. 508 (12 TEX) LBS. ×ABN FLONGATION.	228 (27 TEX) PCT. 200 (27 TEX) PCT.	228 (27 TEX) INDEX 508 (12 TEX) INDEX	SPINNING POTENTIAL NO. COLOR OF FINISHER	REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	REFLECTANCE (Rd) - PCT. BLUENESS (-b) UNITS

TABLE 12. -- CONTINUED

	1	 			i	LES	 			<u> </u>	-0R	iz	RAWI	1 3	
L ES	] 	NGTH	ELONG	ATION	AP	PEARANCE		NEPS	1 2	<u> </u>	! ! !	BLEACHE	10	 ∆0	1
	22s :	508	228:	: 50s	22		- 25		NO.	. ~	+ p		- q +	-	<u> </u>
	1			 	i 1			ATION CO	EFF1C1	ENTS (r			i i		i i
CLASSIFICATION: GRADE INDEX STAPLE 32ND IN.	+.68	+.64	+.55	+.55	+.58 +.48	+.70	17	18	+.59	+.84	18	+.57	12	45	+.55
2.5% SPAN IN. 2.5% SPAN IN. 8.50/2.5 UNIF PCT. MICRONALE FOR	+.92+.53	+.91 +.56 46	+.81	+.80 +.62 48	+.47	+.43	04	26	+.92 +.59 46	+.69	50 14 +.33	+.53 +.19 37	35 01 +.09	+.04 +.31 50	00 34 +.41
ZERO GAGE MPSI 1/8" GAGE G/TEX ELONGATION (1/8") - PCT.	02 +.72 +.83	05 +.73 +.78	+.15	+.04	+.46	+.40	56	31	10 +.69 +.82	+.36 +.70 +.48	+.27	+.07 +.24 +.57	+.27	65 42 +. 11	70°-
VISIBLE WASTE PCT. TOTAL WASTE PCT.	45	35	41	34	42	32	+.14++.41	+.09	35	48	10	74	11	+.06	17
SCHAMESS (Rd) PCT. YELLOWNESS (+b) UNITS	+.77	+.73	+.79	+.77	+.70 +.06	+.64	25	20	+.71	+.75	29	+.54	17	32	+.40
CARD WASTE PCT.	59	51	61	60	67	94	4.40	+.43	51	70	15	71	19	+.25	32
LBS.	+1.00	+.97	+.88	+.87	+.47	+.44	+.07	90	96.+	+.72	41	+.65	28	+.01	+0.+ +0
50s (12 1EX) PCT.	+.88	+.79 +.89	+1.00	+.87	+.68	+.35	27	05	+.80	+.59	26	+.67	27	04	+.08
22s (27 TEX) INDEX 50s (12 TEX) INDEX VARN NEDS:	+.47 +.44	+.36	+.68	+.47	+1.00	+.61	72	42	+.33	+.48	+.14	+.40	09	54	+,55
SPINNING POTENTIAL NO. COLOR OF FINISHER	96.+	+.07 06 99	27 05 +.80	13 10 +.91	72 42 +.33	36 52 +.31	+1.00 +.38 +.09	+.38	+.09	15 33 +. 66	52 32 46	14 04 +.55	19 34 21	+.66 +.39 +.16	32
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	+.72	+.71	+.59	+.58	+.48	+.69	15	33	+.66 46	+1.00	+1.00	+.67	20	42	+.52
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	+.65	+.54	+.67	+.51	+.40 09	+.35	14	04	+.55	+.67	+.72	+1.00	14	01	+.14
REFLECTANCE (Rd) - PCT. BLUENESS (-b) UNITS	+.01	+.09	+.08	+.10	54 +.55	73	+.66	+.39	+.16	42	27 +.16	01	+.07	+1.00	+1.00

TABLE 12A. -- COTTON: SIMPLE CORRELATION ANALYSIS FOR FIBER AND PROCESSING TEST RESULTS ON COMBED YARN FROM 14 LONG STAPLE SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

					1 6	PROPERTIES	; 	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
IEST ITEM	COMBER		STRENGTH	ELON	3TH   ELONGATION	APPEARANCE	1		EPS
		1 228	: 508	22s	!	22s	S	22s	
		 		CORRELATI		IENTS (r	i ,	 	
CLASSIFICATION: GRADE INDEX STAPLE 32ND IN.	45	+.72	+.64	+.50	+.55	+.67	+,48	52	31
2.5% SPAN IN. 50/2.5 UNIF PCT. MICRONAIRE STORY.	87 63 +.32	+.91 +.56 42	+.95 +.54 41	+.74+.59	+.73	+.13 +.12 +.17	+.21 +.16 +.57	27 +.04 18	51 44 39
ZERO GAGE MPSI 1/8" GAGE G/TEX ELONGATION (1/8") - PCT.	+.12 66 82	+.05 +.73 +.81	+.02 +.74 +.83	05 +.40 +.90	+.05 +.47 +.91	+,49	+.45+.43+.22	1.55	27 43 48
VISIBLE WASTE PCT. TOTAL WASTE PCT.	+.32	45	38 41	37	74 57	61	40	+.23	+.41
GRAYNESS (Rd) PCT. YELLOWNESS (+b) UNITS	58 +.35	+.81	+.77	+.76	+.79	+.62	+,43	65	1.38
COMBER WASTE PCT.	+.45	60	56	51	65	56	66	+.52	+.70
22s (27 TEX) LBS. 50s (12 TEX) LBS.	86	+1.00	+.99	+.80	+.78	+.36	+.21	30	37
22s (27 TEX) PCT. 50s (12 TEX) PCT. VAPN APPEADANCE.	76	+.80	+.81	+1.00	+.94	+.27	+.11	36	32
22s (27 TEX) INDEX 50s (12 TEX) INDEX VAPN NEDS.	19	+.36	+.28	+.27	+.37	+1.00	+.58	46 65	31
COLOR OF FINISHER  COLOR OF FINISHER  CRAWING SLIVER:	+.02+.40	30	30	36	48	46	65	+1.00	+.45
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	54 +.24	+.76	+.74	+.45	+.54	+.40	+,40	56 .	41 24
REFLECTANCE (Rd) - PCT. YELLOWNESS (+b) - UNITS	59	+.63	+.65	+.58	+.69	+.35	+.17	+.21	44 14
REFLECTANCE (Rd) - PCT. BLUENESS (-b) UNITS	90.+	01 +.07	+.02 +.04	4.08 00	+.15	54 +.56	+.57	+.64	+.27

TABLE 13.--COTTON: MULTIPLE REGRESSION ANALYSIS FOR SELECTED FIBER TEST MEASUREMENTS WITH PROCESSING TESTS, 104 SHORT STAPLE SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

<u>~</u>		.61 .69 .70 .71		.56 .64 .68 .70	.56 .63 .67		.43 .53 .60	. 556 . 556 . 556
STANDA   STANDA   ERROR   OF   ESTIMA		. 72 . 63 . 63 . 62		14.79 13.39 12.80 12.31 12.15	5.61 5.18 4.90 4.78		. 556 . 488 . 488 . 488	. 440 . 440 . 399
COLOR OF RAW STOCK				+1.51 +1.35 +1.34	†††*+ †††*+			+.02
SHIRLEY ANALYZER NONLINT		+ + + + + + + + + + + + + + + + + + + +					90	
1/8"   1/8"   ELON-							+.14	+.17
0 = 1 CE = 1	1 -			+3.25	+1.96 +1.93 +1.81			04
F1B STRE ZERO GAGE	COEFFICIENTS (b						11.09	09 07 06
11 CRO-	EGRESSION CO	+.29		-20.72 -18.64 -18.66 -17.70	-5.54 -4.95 -4.60			- 45 - 43 - 39
FIBER LENGTH 	X	+ + + + + + + + + + + + + + + + + + + +		61	17			
S S	1   1   1   1			+102.61	+37.17			
FICATION STAPLE		31		+14.39 +12.55 +12.69 +10.49 +8.75	+5.45 +4.13 +3.65 +3.77 +3.14		+.18	+++
CLASSII		02						
CONSTANT CLASSIFICATION		+4.50 +13.63 +9.80 +11.87		-151.37 -8.09 -131.13 -120.74 -158.04	-75.10 -75.71 -37.37 -73.17		+17.26 +18.33 +10.57 +8.38	+13.96 +7.46 +8.92 +6.24 +5.36
NO. OF INDEP. VAR.		ひたのソー		2535-	24357		25357	25357
DEPENDENT VARIABLE		TOTAL PICKER & CARD WASTE	YARN STRENGTH:	8s (74 TEX) -	22s (27 TEX) -	ELONGATION:	8s (74 TEX) -	22s (27 TEX) -

TABLE 13. -- CONTINUED

	<u>-</u> -							110	
STANDARD	ш			6.98 6.84 6.74 6.71 6.67	8.34 8.10 7.90 7.88 7.75		5.87 5.83 5.80 5.74 5.72	18.22 17.88 17.72 17.78	4.94 4.37 4.14
COLO				-3.51 -4.00 -4.37 -4.29	-3.40 -4.02 -4.05 -4.29 -5.10			+6.92 +7.37 +7.40 +7.40	
	ANALYZ NONLIN			-1.11 94 -1.22	89				
	ELON-  GATION	s) - (s			-3.21 -3.08 -2.62 -2.99		+2.96	+1.68	
FIBER STRENGTH	ZERO : 1/8" GAGE : GAGE	REGRESSION COEFFICIENTS (b'					++.38	+.91	
1	NA NA NA NA	ESSION CO		+4.85 +4.38 +3.90 +4.65			-2.57		-4.71
 14 LE	2.5%: 50 SPAN: U			+ . 66	+1.32 +1.17 +1.37		+39.48 +34.99 +40.51 +37.02	+126.78 +123.62 +132.74	+180.95 +107.09 +98.85
1	STAPLE	 		+1.02	34		-1.18 -2.03 -2.16 -2.10	-5.22 -3.73 -6.36 -6.67	+2.97 +2.73
T CLAS	GRADE				34				2 2 . 2
CONSTAN	(a)			+151.61 +136.27 +146.85 +118.26 +77.35	+143.65 +169.50 +111.26 +121.50 +157.87		+43.58 +31.37 +50.50 -18.46	+197.13 +84.06 +37.51 +39.45 -91.95	-133.09 -153.19 -118.05
NO. 08	I NDE P. VAR.			24357	していいし		ひたのひし	してよる	- 28
	DE PENDEN I VAR I ABLE		YARN APPEARANCE:	8s (74 TEX) -	22s (27 TEX) -	YARN NEPS:	8s (74 TEX) -	22s (27 TEX) -	SPINNING POTENTIAL

 $R^2$ 663 .22 .31 .40 .43 .37 .41 .44 .47 .48 .32 .18 .22 .26 .27 .29 .12 .20 .20 .20 STANDARD ERROR OF ESTIMATE 4.06 3.97 3.89 3.80 3.76 32233 1.13 1.07 1.02 1.01 20000 4444 50000 1.08 -1.68 -1.94 -1.76 -2.25 + . 64 + . 55 + . 55 + . 55 + . 57 -.75 -.55 -.53 -.43 +.43 +.33 +.33 COLOR OF RAW STOCK +1.13 +.99 +.85 +.78 -.064 +.22 +.20 +.15 +.14 +.14 +.09 -.07 -.07 -.07 -.06 Rd 1/8" SHIRLEY ELON-|ANALYZER |GATION|NONLINT ı 1 -.09 REGRESSION COEFFICIENTS (b's) : 1/8" : GAGE +.004 FIBER STRENGTH | ZERO | GAGE ...-----|MICRO-| ; 50/2.5|NAIRE | ; UNIF.| -2.93 -1.14 -1.42 -1.27 -1.35 +.52 +.52 +.52 +.52 +.56 94.-+.26 +.27 +.25 +.64 +.80 +.78 -.05 +.05 -. 11 F1BER LENGTH +5.03 +1.71 ı 2.5% SPAN ı 1 NO. OF CONSTANT CLASSIFICATION INDEP. STAPLE -.05 -.07 -.09 -.62 +, 44 +.25 +.22 +.23 -.25 GRADE -.06 -.04 -.08 -.06 .... -.29 +.04 +.03 +.03 +.03 +2.55 +7.63 +9.38 +9.51 +10.96 -8.19 +18.43 +3.09 +11.35 +41.85 +4.10 +9.20 +8.70 +9.65 +7.80 +74.93 +81.15 +74.67 +68.94 +72.38 +14.43 +40.37 +29.22 +31.84 +29.15 +39.63 +24.17 +29.67 +27.54 +27.72 2435 24357 2435 2435 2435-2435-COLOR OF FINISHER DRAWING SLIVER: 1 1 1 BLEACHED (+b) BLEACHED (Rd) DEPENDENT VARIABLE GRAY (Rd) SRAY (+b) DYED (Rd) DYED (-b)

TABLE 13. -- CONTINUED

TABLE 14.--COTTON: MULTIPLE REGRESSION ANALYSIS FOR SELECTED FIBER TEST MEASUREMENTS WITH PROCESSING TESTS, 295 MEDIUM STAPLE SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

R 2	23.000		.65 .76 .81	.66 .70 .76 .80	. 227 . 42 . 51 . 52	. 24 . 44 . 47 . 50
STANDARD    STANDARD    ERROR     OF     ESTIMATE	. 76 . 73 . 70 . 70		9.02 8.51 7.51 6.38	4.17 3.93 3.49 3.19	393 337 356 356	333488
COLOR OF RAW STOCK	1		+.54	+, 23	+.02	. 05 + 02 + 02
SHIRLEY ANALYZER NONLINT	+++++					
1/8"   1/8"   ELON-  GATION	12.	1			7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	+.30 +.27 +.30 +.27
F1BEI STRENG STRENG ERO :	FICIENT		+6.12 +4.87 +4.23 +3.25 +2.80	+2.88 +2.29 +2.00 +1.59 +1.40		+ . 11 +
MICRO	EGRESSION COEF		-9.91 -9.34 -8.40	-4.42 -4.18 -3.77	21	19
)/2. JNIF			+2.40 +2.41	+1.02	+.08 +.08 +.07	+.08
F1BER F1BER LENGTH	1 242	-	+84.57 +133.95 +151.85 +148.72	+39.87 +61.90 +69.50 +68.16	+4.11 +3.84 +4.51 +4.05	+2.52
	1					
CLASS						
CONSTANT (a)	+ + + + + 63 + 10.44 + 13.31 + 114.03	•	-39.14 -100.46 -94.82 -198.61 -230.06	-32.67 -61.59 -59.07 -103.16	+3.45 -1.10 -4.45 -4.45 -4.10	+2.28 +.78 21 -4.75
NO. OF INDEP.	- 0 の コ サ	`	24357	<b>2</b> 4 8 8 9 - 1	してはらい	2430-
DEPENDENT VARIABLE	TOTAL PICKER & CARD WASTE	YARN STRENGTH:	22s (27 TEX) -	50s (12 TEX) -	22s (27 TEX) -	50s (12 TEX) -

R 2 .15 .26 .30 .32 .34 06 13 20 21 22 .16 .20 .23 .27 .30 .08 .17 .19 .19 .59 .67 .75 .79 .80 STANDARD ESTIMATE 39.27 38.42 37.58 36.84 36.18 12.86 12.05 11.75 11.59 131.54 125.47 124.18 124.13 124.08 6.58 6.33 6.10 6.06 8.45 7.58 6.61 6.03 5.95 +4.12 +2.48 COLOR OF RAW STOCK **9** -1.24 -1.09 -1.00 -1.68 +3.73 +.27 Rd - 1/8" SHIRLEY | ELON- ANALYZER | IGATION NONLINT +8.37 -1.38 -1.86 +13.93 +5.04 +3.48 +2.89 +2.10 +1.88 REGRESSION COEFFICIENTS (b's) ZERO : 1/8" GAGE : GAGE +8.44 +9.92 +4.39 +5.07 FIBER STRENGTH -.15 7; : 50/2.5|NA!RE | ... +10.30 +11.90 +13.19 +12.30 -25.21 -24.29 -21.06 -46.68 -41.72 -46.22 -9.13 -8.66 -8.20 +3.73 +4.45 +6.12 +5.67 +5.75 -25.02 -27.45 -29.47 -29.48 +1.77 +1.23 +1.23 +1.32 +1.94 FIBER LENGTH +867.59 +1022.82 +1019.28 +648.16 -58.06 -60.82 +288.69 +434.00 +296.85 +105.41 +150.88 +165.37 +163.81 2.5% SPAN STAPLE +12,63 GRADE +.51 -2.66 +1437.78 +611.79 +739.35 +640.37 +603.49 +181.94 +125.49 +60.66 +90.89 +107.59 -115.18 -176.49 -219.09 -311.10 -65.58 -142.01 -136.82 -220.81 -236.44 +48.09 +23.05 +28.40 +39.01 +44.17 24357 24357 ひたのりし 24357 24357 YARN APPEARANCE: ı 1 22s (27 TEX) 50s (12 TEX) (27 TEX) 50s (12 TEX) DEPENDENT VAR I ABLE YARN NEPS: SPINNING

TABLE 14. -- CONTINUED

 $\mathbb{R}^2$ .29 .32 .35 .37 32 34 36 38 38 STANDARD ERROR OF ESTIMATE 1.59 .60 3.96 3.88 3.83 3.82 3.82 1.02 1.00 1.98 .97 -1.14 -1.43 -1.49 -1.65 +.75 +.72 +.70 +.68 +.69 + + + + + .26 COLOR OF RAW STOCK +.75 +.68 +.63 +.50 +.44 +.10 +.08 +.09 -.06 ZERO: 1/8" | SHIRLEY | ZERO: 1/8" | GATION | NONLINT | GAGE | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | NONLINT | CATION | REGRESSION COEFFICIENTS (b's) -.09 FIBER STRENGTH +.01 +.02 +.02 +.01 : 50/2.5 | NAIRE | : UNIF. | -1.47 -1.47 -1.34 -1.26 -.95 +.96 +.96 +.86 +.76 +.43 +.03 FIBER LENGTH +3.80 +8.51 +10.71 +3.01 +3.43 +5.72 -1.83 -4.43 68 2.5% SPAN INO. OF CONSTANT CLASSIFICATION INDEP. STAPLE GRADE -.02 -.02 -.02 +82.08 +86.10 +84.16 +84.05 +82.46 +34.00 +36.68 +33.46 +32.26 +34.11 +28.27 +25.19 +22.95 +24.64 +23.72 +20.98 +36.49 +22.92 +25.02 +33.02 +2.05 +4.02 +2.82 +4.53 +4.09 +2.73 +4.32 +5.24 +4.13 +3.83 (a) ひたろろし ひたろろし ひたのりし 24357 ひたのり ひたのりつ COLOR OF FINISHER DRAWING SLIVER: BLEACHED (Rd) BLEACHED (+b) DEPENDENT VAR I ABLE GRAY (Rd) DYED (-b)

TABLE 14. -- CONTINUED

TABLE 15.--COTTON: MULTIPLE REGRESSION ANALYSIS FOR SELECTED FIBER TEST MEASUREMENTS WITH PROCESSING TESTS, 14 LONG STAPLE SAMPLES COLLECTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980.

R 2		.91 .93 .91 .94		. 84 . 91 . 95 . 96	. 83 . 95 . 95 . 96	)		.75 .80 .86 .90 .93
STANDARDI ERROR OF		4		8.34 6.56 7.00 4.93	3.90 3.05 2.27 2.11 1.66		225 225 228 1	
R OF STOCK				+2.60			+. 13	+.17
<u>-</u>	i I I I I I I	90						+.05
I WAZ	'           	+1.01 +.82 +.72 +.90						
1							+1.66 +1.69 +1.61 +1.44 +1.38	+1.30 +1.19 +.93 +.94
EER NGTH 1/8" GAGE	TS (b's	+.21			+2.93			+.10 +.14
FIBER STRENGTH STEROTH ZERO: 1/8							+.06 +.07 +.06 +.06	
MICRO-	NOIS			-12.84 -14.24 -17.94	-7.70 -7.53 -14.37		. 33	40 56 74 66
0/2.5 UNIF.	REGRES				+2.23 -			÷ ;
1	' '	-18.18		+355.49 +298.75 +283.15 +307.62 +190.36	+158.00 +147.93 +126.84 +59.48		+9.09	+4.95
ICATION STAPLE	,	+.42		+3.88			25	
CLASSIF	i 1	07		+1.11 +1.09 +1.07 +1.16	+ .42			
NO. OF CONSTANT CLASSIFICATION INDEP.   CAR.   (a)   CRADE : STAPLE		+5.20 +9.85 +13.50 +13.34 +22.68		-286.29 -323.34 -248.64 -291.22 -288.38	-138.44 -94.12 -108.98 -104.32		-3.93 -9.73 -8.81 -9.54	-2.93 55 63 -2.54 -7.81
NO. O INDEP		していいし		-0×40	しいちょう		74307	24307
I ⊢ 1	i	ICKER WASTE	RENGTH:	(27 TEX) -	(12 TEX) -	ELONGATION:	(27 TEX) -	(12 TEX) -
DEPENDEN		TOTAL PICKER & CARD WASTE	YARN STRENGTH:	22s (2.	50s (13	YARN EL	22s (2	50s (1

 $R^2$ .43 .67 .69 .49 .70 .77 .82 .82 .31 .50 .67 .72 .76 .49 .67 .71 .93 . 92 . 95 . 95 . 95 STANDARD ESTIMATE 10.06 8.05 7.39 6.30 6.30 11.40 10.15 8.58 8.32 8.21 55.25 47.85 46.21 46.85 46.95 7.94 5.86 5.09 4.89 -27.69 -28.52 -36.80 -12.31 -11.17 -12.06 -12.63 +5.08 +7.67 +5.56 COLOR OF RAW STOCK +2.04 +2.36 +2.67 +2.19 +1.22 +1.53 1/8" SHIRLEY ELON- ANALYZER GATION NONLINT -3.85 -3.72 -3.54 +3.30 -9.57 -15.58 +19.62 +89.29 REGRESSION COEFFICIENTS (b's) -4.93 -3.90 -3.06 -3.41 : 50/2.5|NAIRE | ZERO : 1/8" : UNIF. | GAGE : GAGE FIBER STRENGTH -2.37 -2.62 -2.59 -3.03 +1.66 +19.41 +16.22 +15.38 +14.41 +12.90 +15.01 +15.53 +14.36 -138.85 -137.75 -114.36 -123.95 -97.07 -16.72 -18.63 -22.17 -25.73 +2.69 -5.07 -4.13 +2.52 F1BER LENGTH +337.45 +315.58 +293.31 +234.10 ı +88.54 2.5% SPAN INO. OF CONSTANT CLASSIFICATION INDEP. | -------GRADE : STAPLE -19.80 -27.82 -22.93 -36.24 +3.56 +4.18 +1.32 +1.41 +1.86 +1.50 ı -32.32 -139.62 -194.13 -276.57 -352.94 -40.77 -105.31 -166.87 - 49 +298.02 +253.30 +433.53 +500.06 +427.49 +758.14 +1439.32 +1870.61 +1962.31 +2104.60 -310.83 -214.58 -169.30 -139.95 -183.10 2435-2435-2435-2435-2435 YARN APPEARANCE: 1 1 ----22s (27 TEX) (12 TEX) 22s (27 TEX) DEPENDENT VARIABLE YARN NEPS: SPINNING POTENTIAL

TABLE 15. -- CONTINUED

R 2		.70 .80 .90 .90	. 92 . 94 . 94 . 95	.40 .60 .72 .72	.38 .41 .43		.36 .75 .85
STAN ERR 0 ESTI	1 1 1 1 1 1 1 1 1	3.19 2.72 2.333 2.09	. 25 . 19 . 18 . 17		77. 74. 74. 87. 87.	1.08 1.00 1.00 1.00 1.00 1.00 1.00	80 70 70 71 71 71
OF TOCK +b			+.73 +.73 +.79 +.82 +.80		+ . 36 + . 40 + . 40 + . 43 + . 39		
!	   1   1   1					- 12	+.16
SHIRLEY ANALYZE NONLINT	1 1 1 1 1 1 1 1 1 1 1	-1.37		59			
1/8"     1/8"    -  ELON-   GATION		-6.66 -5.62 -6.99		-1.22	44		
TH 1/8" GAGE	- q - Q			17		22	+
ZE	COEFFICIENTS	+.42	+.07 +.07 +.07 +.08		+.06 +.07 +.07	37	+.24 +.20 +.14 +.14
MICRO-	SSION		19	-1.08 -1.06 94 -1.36	33 36 49	-1.45 -1.78 -1.91 -1.98	+1.75
L CTER	REGRE				+.06	+.41	46 33 37
2.5 SPA	1	+39.05 +71.99 +68.92 +76.65	-5.45				
ICATIO	,		+.06 +.07 +.24	+ + .15			
1		+				1.10	+.08
CONSTAI		-3.60 -29.80 -34.15 -69.42 -53.61	+2.90 -3.36 -5.77 -6.26	+92.61 +97.46 +91.66 +89.88 +91.94	+1.61 -3.52 -3.50 -6.52	+61.45 +62.90 +68.09 +50.31 +41.72	+10.59 +6.91 +33.49 +19.32 +21.29
NO. OF INDEP.	<u>~</u>	クセッソー	2435-	24357	ひたみいつ	ひた30-	24321
	FINISHER SLIVER:		1 1 1 1	(Rd) -	- (q+)		
DEPE	COLOR OF DRAWING	GRAY (Rd)	GRAY (+b)	BLEACHED (Rd)	BLEACHED (+b)	DYED (Rd)	DYED (-b)

TABLE 15. -- CONTINUED

 $\mathbb{R}^2$ 25 95 95 95 95 999999 .83 .84 .85 .85 883 |STANDARD| | ERROR | ESTIMATE TABLE 15A.--COTTON: MULTIPLE REGRESSION ANALYSIS FOR SELECTED FIBER TEST MEASUREMENTS WITH PROCESSING TESTS, ON COMBED YARN FROM 14 LONG STAPLE SAMPLES COLLCTED AT TRIWEEKLY INTERVALS FROM SELECTED GIN POINTS, CROP OF 1980. 2.38 1.81 .98 .91 ..04 .93 .57 .57 .57 7.02 4.78 2.86 2.34 1.73 35555 .22 .21 .21 .19 .19 -.83 -.97 -1.06 +.10 +.11 +.21 +.1 COLOR OF RAW STOCK **9** +.01 Rd 1/8" SHIRLEY ELON-IANALYZER +.08 +1.28 +1.21 +1.06 +1.09 +1.26 +1.35 +1.52 +1.29 REGRESSION COEFFICIENTS (b's) -.21 +.35 +1.86 ZERO : 1/8" GAGE : GAGE F1BER STRENGTH -11.19 -12.25 -15.86 +2.89 +3.12 +3.13 -4.86 -4.74 -5.11 +1.65 -.07 -.10 -.09 F I BER LENGTH -34.53 -42.58 +279.11 +224.08 +210.48 +179.65 +129.87 +123.51 +108.35 +114.76 +3.38 2.5% SPAN STAPLE -1.47 -1.30 -1.16 +1.08 +1.06 +1.13 +1.03 +.30 +.30 +.27 GRADE +.02 +56.06 +72.46 +65.83 +64.79 +67.73 -176.66 -212.60 -147.51 -188.02 -170.03 -96.95 -68.97 -79.65 -90.79 -1.08 +.48 +.31 -.92 -2.20 -3.70 -1.71 -3.43 してませら 7435-2435 2435 2 th 30 m YARN ELONGATION 1 YARN STRENGTH 22s (27 TEX) 50s (12 TEX) 22s (27 TEX) 50s (12 TEX) DEPENDENT VARIABLE COMBER WASTE

.45 .58 .62 .70 .76 .39 .67 .73 .76 . 58 . 58 . 72 . 76 .37 .60 .66 .71 .78 R2 |STANDARD| | ERROR ESTIMATE 9.15 8.76 8.66 8.91 84.22 69.70 67.91 66.51 61.38 7.65 6.77 6.54 6.17 6.04 2.81 2.57 2.54 2.37 2.27 0 F -72.64 -58.04 -57.65 -41.01 +4.85 +2.79 COLOR OF RAW STOCK +1.91 +2.20 +.90 +1.27 -1.35 -1.13 -2.93 -2.59 1/8" SHIRLEY ELON- ANALYZER GATION NONLINT +32.58 +30.89 +37.16 -6.44 -10.80 REGRESSION COEFFICIENTS (b's) ZERO : 1/8" GAGE : GAGE +28.16 FIBER STRENGTH +.553+.46 +1.27 -.93 -1.67 -9.12 : 50/2.5|NAIRE | : UNIF.| +31.87 +28.82 +23.97 +23.62 -11.62 -13.41 -10.64 -167.51 72.64 +3.34 +2.93 FIBER LENGTH -83.84 -2160.39 2.5% SPAN ı -41.40 -62.29 -51.33 -50.97 NO. OF CONSTANT CLASSIFICATION INDEP. +2.40 STAPLE +1.02 GRADE + . 45 +121.94 +257.88 +88.33 +55.32 +133.41 +1633.62 +3025.48 +2403.13 +3220.21 +2856.41 +88.97 +43.53 +32.32 +47.40 +43.80 +145.96 -163.14 -215.18 -151.43 -194.89 2435-24357 2435-2435 YARN APPEARANCE: 22s (27 TEX) 50s (12 TEX) 22s (27 TEX) 50s (12 TEX) DEPENDENT VARIABLE YARN NEPS:

TABLE 15A. -- CONTINUED

#### DESCRIPTION OF STATISTICS USED IN ANALYSIS

Some of the statistical concepts used in this study may be unfamiliar to many who will find the information in this report useful. Results reported in this study include the means, standard deviations, simple correlations, regression equations and coefficients of determination (R-squares). Formulas for each of these results may be found in any good textbook on statistical correlation. However, for those not familiar with these concepts, the following common language explanation is given for each item as it is used in this report:

- a. Mean value is the simple arithmetical average of each measured property for the spinning lots included in the study.
- b. Standard deviation is a measure of dispersion around the mean value expressed in the same terms as the variable. For a normal distribution, approximately 68 percent of the values will be within plus or minus one standard deviation of the mean, 95 percent within plus or minus two standard deviations, and nearly all values will be within plus or minus three standard deviations.

Example: (From Table 9, page 88) The mean or average Fibrograph 2.5% span length for the short staple cottons is 0.978 inches. The standard deviation is 0.034 inches. This indicates that 68 percent of the lots tested in the short staple group should have a fiber length between 0.944 and 1.012 inches. The fiber length of ninety-five percent of the lots tested fall between 0.910 and 1.046 inches and nearly all would be between 0.876 and 1.080 inches.

c. Simple correlation coefficient (r) is a measure of the linear relationship between two variables, i.e., how one variable is associated with the other. A correlation coefficient of 0 indicates no relationship, and 1.0 indicates a perfect relationship. A plus sign before the correlation coefficient indicates that the values for both variables change in the same direction, whereas a minus sign indicates that they change in opposite directions.

Example: (From Table 11, page 93, line 1) The simple correlation coefficient of the grade index with picker and card waste is -.62. This indicates that grade index and picker and card waste are inversely related, i.e., as one goes up or down the other goes in the opposite direction.

d. Regression equation or prediction equation is used to estimate changes in the dependent variable which will result from changes in the independent variable or variables. It is written:

$$Y = a + b_1 X_1 + b_2 X_2 + ... + b_N X_N$$

where Y is the dependent variable and the X's are independent variables.

## d. Regression equation (continued)

The constant "a" indicates the starting point or height of the regression line when it is to be plotted on a graph or to be used in calculating changes in the dependent variable. The regression coefficient "b" indicates the directional change in the dependent variable that is associated with changes in the independent variable. The spread or scatter of the data around the regression line is measured by the standard error. The standard error has the same relationship to the regression line as the standard deviation has to the mean value (see paragraph b, above).

<u>Example</u>: (From Table 14, page 101) The constant, coefficients and standard error for the regression equation with 22s yarn as the dependent variable are:

- !	94.82
+]	33.95
-	9.91
+	4.23
+	7.51
	+1

With regression coefficients (b's) of +133.95 for 2.5% span length, -9.91 for micronaire reading and +4.23 for 1/8-inch gage fiber strength, the following average conditions should exist:

- (1) With any unit changes (.01 inches) in 2.5% span length, yarn strength should change 1.34 lbs. in the same direction.
- (2) With any unit change (1.0) in micronaire reading, yarn strength should change 9.91 lbs. in the opposite direction.
- (3) With any unit change in 1/8-inch gage fiber strength, yarn strength should change 4.23 lbs. in the same direction.

Expressing the equation algebraically:

```
Yarn strength 22s (1bs) = -94.82 + 133.95 (2.5% span length) -9.91 (mike) +4.23 (1/8-inch gage fiber strength)
```

To predict the yarn strength from a bale of cotton with a medium fiber length of 1.05, a micronaire of 4.0 and a fiber strength of 22 grams per tex, the equation would be:

Yarn strength (1bs) = 
$$-94.82 + 133.95(1.05) - 9.91(4.0) + 4.23(22)$$
  
Yarn strength (1bs) =  $99.25$ 

The standard error can be used to establish a lower and upper limit about the predicted value. In this example, the standard error of 7.51 pounds indicates that yarn strength from a bale of cotton with these fiber properties should be  $99.25 \pm 7.51$  pounds or between 92 and 107 pounds 68 percent of the time.

## d. Regression equation (continued)

Regression equations are given in the tables for simple and multiple relationships. Equations for simple relationships may be calculated by using the formula:

$$Y = a + bX$$
  
where  $a = Mean Y - b (Mean X)$   
 $b = r \frac{Std. Dev. Y}{Std. Dev. X}$ 

Estimating an equation with more than one independent variable is more complex. Most statistical textbooks describe the method for estimating multivariate equations.

e. R-square  $(R^2)$  when multiplied by 100 will give the coefficient of determination. The resulting percentage is the amount of the variation in the dependent variable explained by the independent variable(s). In the above example  $R^2$  = .76; therefore, 76% of the variation in yarn strength is explained by the 2.5% span length, micronaire, and 1/8-inch gage fiber strength. The remaining variations in yarn strength (24%) is unexplained by the three independent variables in this equation.

For simple regressions (equations containing one independent variable) the cooefficient of determination can easily be obtained by squaring the simple correlation coefficient and multiplying by 100.

The multiple correlation coefficient (R) can be obtained by taking the square root of R-square. This coefficient is a measure of the linear relationship between one dependent variable and two or more independent variables. It has no plus or minus sign because one independent variable may contribute positively, and another negatively, in explaining the variation in the dependent variable. The multiple R may fall between 0 and 1.0, with 0 indicating no relationship and 1.0 a perfect relationship.

### INTERPRETING STATISTICAL DATA

In referring to the data presented in the tables of this report, it is well to keep in mind several factors which influence the results and could lead to erroneous conclusions.

Results obtained from regression analysis are significantly influenced by the specific variables included in an equation and by their number. This is mainly due to the interrelationships of fiber properties. As interrelated properties (independent variables) are added to an equation, the specific contribution of a given property may decrease sharply while at the same time the overall correlation will increase. For example, a correlation of staple length with yarn strength usually shows a good relationship, with a large amount of the variation in yarn strength explainable by differences in staple length. But, as other measures are taken into consideration, particularly fiber strength at 1/8-inch gage, the importance of staple length in explaining the total variation in yarn strength decreases rather sharply; even though the total variation explained is increased. This situation occurs because fiber strength is more closely related to yarn strength than is staple length. Yet, when fiber strength is not included in the equation, some of the effects of strength are evidenced through the interrelation of strength and staple length. Perhaps the most important fact to be kept in mind is that interpretations are no better than the principles used in the analysis. To estimate the importance of a specific variable, all of the available data should be studied using the appropriate statistical techniques.

#### BASIS FOR INTERPRETATION OF TEST RESULTS

The following explanation of the data published in Tables 1 through 8 of this report may be helpful in the interpretation of test results.

### Classification

Classification was made in accordance with the official Cotton Standards for grade and staple length. These results are presented under the usual terms for the individual lots, but the grade values were converted to an index for averaging in the summary tables.

Grade index, as reported in the summary tables, is designed to reflect differences in market value and provides a method for averaging the grade for a number of individual lots. Middling grade is used as the basis of 100, and higher or lower index numbers reflect higher or lower average market values, respectively. Index values for the various grades of upland cotton are shown below.

		GRADE INDEX						
GRADE				Light			Light	
Name	Code	Plus (0)	White (1)	Spotted (2)	Spotted (3)	linged (4)	Gray (6)	Gray
		(0)	(1)	(2)	(3)	(4)	(0)	(7)
Good Middling	(1)		105	103	101		99	93
Strict Middling	(2)		104	102	99	91	98	91
Middling	(3)	102	100	97	93	82	92	84
Strict Low Middling	(4)	97	94	89	83	75	85	75
Low Middling	(5)	90	85	80	75	68		
Strict Good Ordinary	(6)	81	76			-		
Good Ordinary	(7)	73	70					
Below Grade	(8)		60					

The grade of cotton is obtained by evaluating color, leaf and preparation in relation to the official standards. Grade provides an indication of fiber color and the waste content of a sample of cotton. Experience has shown the average relationship between picker and card waste and various grades of upland cotton to be approximately as given in the tabulation shown in the subsequent section on manufacturing waste. In comparing these average grade figures with the picker and card waste data, it should be understood that variations from the averages for individual samples are attributable to the nature of the extraneous material present in the cotton, the characteristics of the fiber, and whether the grade designation was low because of poor color.

Staple length is the length of a typical portion of the fibers in the samples as determined by the classer in comparison with official standards. Uniformity of fiber length, as well as other fiber properties, influences to some extent the classer's selection of the typical portion of the fibers on which the staple length designation is based. In general, there is a fairly close relationship between the staple length as designated by the classer and the fineness and strength of the yarn that can be manufactured from the cotton. These relationships, however, are also influenced by other fiber properties, the measurement of which will be discussed in the paragraphs which follow.

### Fiber Tests

Fiber length data were obtained by the Digital Fibrograph method for the short, medium, and long staple American Upland samples and by the array method for the extra long American Pima and Upland samples. Briefly, the Digital Fibrograph method consists of placing representative specimens of cotton at random on a comb or combs, parallelizing the beards of cotton extending from one side of the combs, and scanning these beards photoelectrically on the instrument at 3 length intervals beginning at 0.15 inch from the teeth of the combs and ending near the outer fringe. The 2.5 percent span length and the 50/2.5 uniformity ratio values reported for each lot are based on five specimens tested by each of two technicians.

The Digital Fibrograph 2.5 percent span length values reported indicate the length which will be spanned by 2.5 percent of the fibers when they are parallel and randomly distributed. It is also the length where the amount of fibers indicated by the instrument is 2.5 percent of the amount at the starting point of 0.15 inch. The Digital Fibrograph 2.5 percent span length values are closely related to staple length designations.

The Digital Fibrograph 50/2.5 uniformity ratio values reported indicate the relative uniformity of fiber length in the samples. They represent the ratios between the 50 percent span length and the 2.5 percent span length, expressed as percentages. Larger values indicate more uniform fiber length distribution. Unusually low fiber length uniformity tends to increase manufacturing waste, to make processing more difficult, and to lower the quality of the product. The following adjective descriptions will serve to classify cottons from the standpoint of 2.5 percent span length and fiber length uniformity:

2.5 Percent	Span Length	50/2.5 Uni	formity Ratio
Below 0.97 0.97 - 1.09 1.10 - 1.28 Above 1.28	Short Medium Long Extra long	Below 41 41 - 43 44 - 46 47 - 48 Above 48	Very Low Low Average High Very High

Data Source: 1,956 American Upland lots tested from the crops of 1974-78.

Array tests for the extra long staple American Pima and Upland samples were performed on the Suter-Webb fiber sorter. Briefly, this method consists of parallelizing the fibers in a representative 75-milligram specimen of cotton through a series of combs, separating the fibers into length groups at 1/8-inch intervals, and weighing the fibers in each length group. The upper quartile length and coefficient of variation values reported are based on one specimen tested by each of two technicians.

The array upper quartile length values reported indicate the length which is exceeded by 25 percent of the weight of the fibers in the samples. They are closely related to and longer than both the Fibrograph and the classer's staple designations. This relationship may vary, however, because the methods measure different fiber length characteristics.

The array coefficient of length variation values reported indicate the relative variability of fiber length in the samples. They represent the standard deviation of the weight-length frequencies expressed as a percentage of the mean length. Smaller values indicate more uniform fiber length distributions. Excessive fiber length variation tends to increase manufacturing waste, to make processing more difficult, and to lower the quality of the product. It is, therefore, considered desirable for a cotton to have a low coefficient of variation. The following adjective descriptions will serve to classify cottons from the standpoint of upper quartile length and fiber length variations:

Upper Quartile L	Length	Coefficient of	Fiber Length Variation
1.07 - 1.21 Me 1.22 - 1.42 Lo	nort edium ong xtra-long		Very low variation Low variation Average variation High variation Very high variation

Data Source: 830 American Upland lots tested from the crops of 1958-60. (More recent data not available)

Fiber fineness and maturity in combination were determined by the micronaire test. This is an instrument test which measures the resistance of a plug of cotton to air flow. A representative standard weight of cotton fibers is placed in the instrument specimen holder and compressed to a fixed volume. Air at a known pressure is forced through the specimen and the amount of flow is indicated by a direct reading scale. Readings obtained are relative measures of either the weight per unit length, or the cross-sectional size of the fibers. Because the instrument measures may differ from the actual weight per inch, depending upon the fiber characteristics of the sample, the results are reported in terms of "micronaire reading" instead of micrograms per inch. These readings are taken from the curvilinear scale adopted in 1950, and now in international use. Fiber fineness contributes to yarn strength, particularly when fine numbers are spun, but it also tends to increase neppiness and to require a reduced rate of processing.

Fiber maturity, also an important factor affecting the appearance of yarns and fabrics, is a desirable characteristic from the standpoint of low picker and card waste. Immature fibers are susceptible to the formation of neps, and contribute to lower yarn appearance grades. The desirability of micronaire reading, therefore, depends on the specific end product or use of the cotton.

Several instruments, including the Micronaire, Fibronaire, and Port-Ar, may be used for these tests. All instruments now use the same scale and report results in the same terms, i.e., "micronaire reading." The micronaire reading is now a part of the official standards for Upland cotton along with grade and staple length.

Fiber strength is an important factor in determining yarn strength. Cottons with good fiber strength usually give less trouble in the manufacturing processes than the weak fibered cottons. Tests for fiber strength are made without a space between the clamp jaws (0 gage) using the Pressley flat bundle tester, and with a 1/8-inch spacer between the clamp jaws (1/8-inch gage) using the Stelometer. Strength results from the Pressley and the Stelometer were controlled at the same level by use of standard calibration cottons. Use of the Stelometer also provides a measure of fiber elongation. Comparative tests have shown that the results of the 1/8-inch gage tests are more highly correlated with yarn strength than the results of the zero gage tests. Results for both methods are reported, however, because the zero gage tests are widely used by the cotton industry.

The results for the Pressley zero gage test are reported in terms of thousand pounds per square inch, as calculated by the use of Formula 1. These results may be converted to other methods of expressing fiber strength by use of Formulas 2, 3 and 4:

(1) Thousand pounds per square inch (Mpsi) =

- (2) Grams per tex  $(G/tex) = Mpsi \times 0.496$
- (3) Strength-weight ratio = Mpsi ÷ 10.81
- (4) Strength-weight ratio =  $G/tex \div 5.36$

The results of the 1/8-inch gage tests are reported in terms of grams per tex in accordance with the recommendations of the American Society for Testing and Materials (ASTM) and the International Standards Organization (ISO). A tex unit is equal to the weight in grams of 1000 meters of the material. There is a correlation between the 1/8-inch gage strength test results and fiber length. Cottons with short lengths tend to have lower average strength values than long staple cottons. Results for Stelometer 1/8-inch gage tests are calculated by use of Formula 5. Stelometer results are adjusted to Pressley level by use of calibration cottons.

(5) Grams per tex =  $\frac{\text{breaking load (kg) x 15}}{\text{bundle weight in mg}}$ 

The following descriptive terms may be applied to the data shown in this report:

Staple Length Group and Descriptive Designation	Zero Gage Strength (thousand psi)	1/8-inch Gage Strength (grams per tex)
Short Staple: Very Low Low Average High Very High	74 - 78 79 - 83 84 - 88 89 - 93 94 - 98	17 - 18 19 - 20 21 - 22 23 - 24 25 - 26
Medium Staple: Very Low Low Average High Very High	70 - 76 77 - 83 84 - 90 91 - 97 98 - 104	16 - 18 19 - 21 22 - 24 25 - 27 28 - 30
Long Staple: Very Low Low Average High Very High	71 - 77 78 - 84 85 - 91 92 - 98 99 - 105	18 - 20 21 - 23 24 - 26 27 - 29 30 - 32
Extra Long Staple: Very Low Low Average High Very High	93 - 96 97 - 100 101 - 104 105 - 108 109 - 112	27 - 29 30 - 32 33 - 35 36 - 38 39 - 41

Data Source: 365 short staple; 1,447 medium staple; 144 long staple; and 88 extra long staple lots of cotton tested from the crops of 1974-78.

<u>Fiber elongation</u> results were obtained in connection with the 1/8-inch gage fiber strength tests by using the Stelometer instrument. The following adjective ratings will assist in the interpretation of the fiber elongation results reported:

Descriptive Designation	Fiber Elongation (Percent)
Very Low	4.9 and below
Low	5.0 - 5.8
Average	5.9 - 6.7
High	6.8 - 7.6
Very High	7.7 and above

Data Source: 1,956 American Upland lots tested from the crops of 1974-78.

Color measurements were made on samples of raw cotton from each lot by using the Nickerson-Hunter Cotton Colorimeter. The basic color values reported are in terms of grayness (Rd) and yellowness (+b) scales designed especially for cotton. Grayness indicates how light or dark the cotton sample is, and yellowness indicates how much yellow color is in the sample. Starting with the 1980 Cotton Fiber and Processing Test Results Survey, new 3-digit color codes are being used in place of the single codes for grayness and yellowness that have been used in recent years. The new color code subdivides each grade into quadrants to denote relative color differences within a grade for a more precise color measurement. The relationship of these new color codes to grayness (Rd) and yellowness (+b) values and to the color of the Universal Grade Standards for upland cotton is show in Figure 2. A color diagram for American Pima cotton is shown in Figure 3.

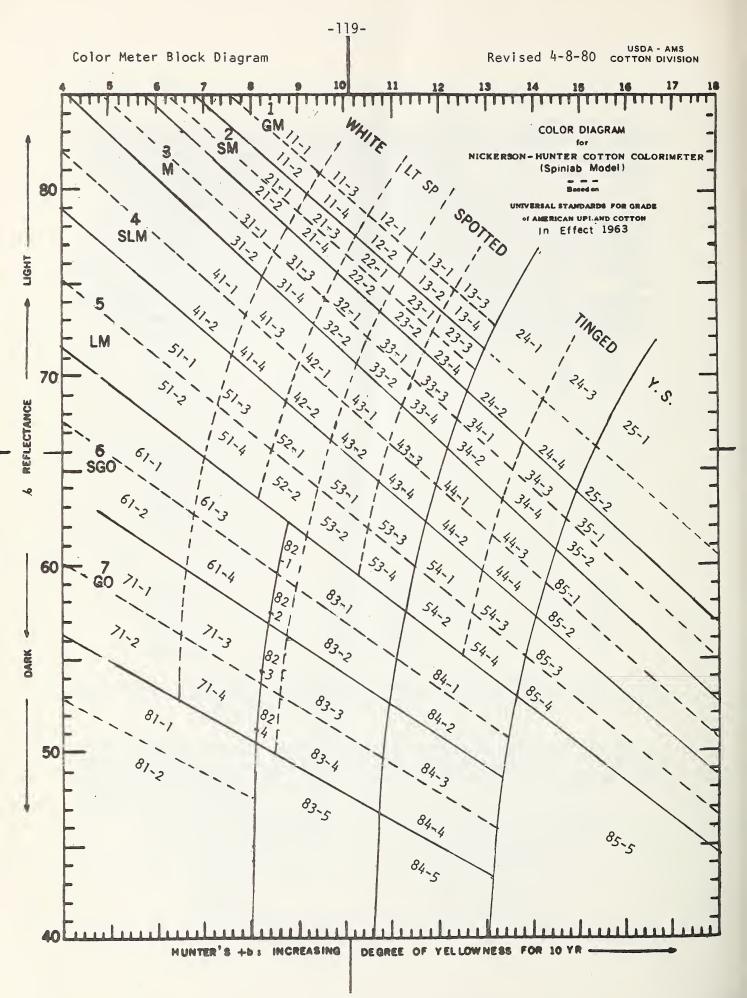


Figure 2

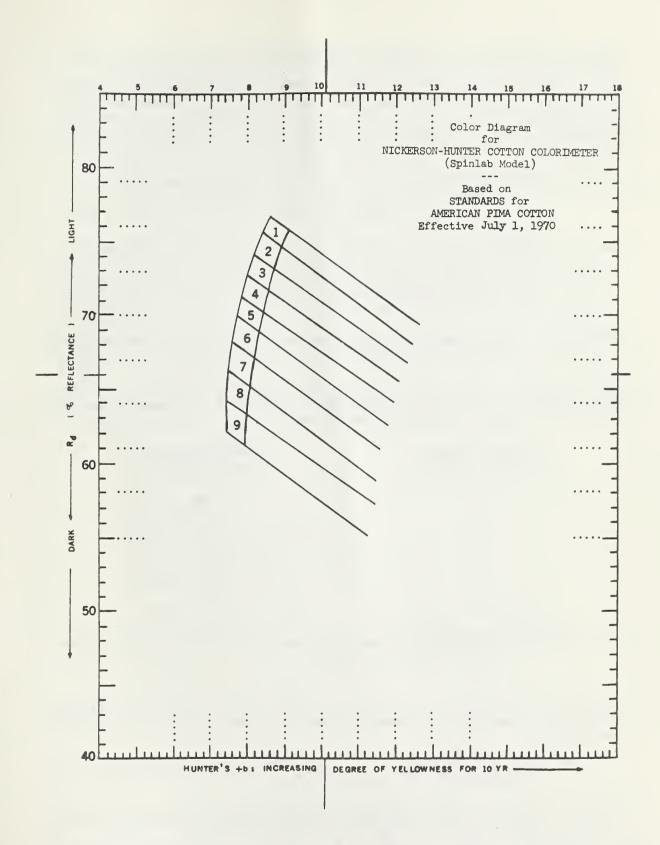


Figure 3. Colorimeter diagram for American Pima cotton.

Non-lint content for the various lots was determined by the use of the Shirley Analyzer which separates the lint from the foreign matter. The total non-lint values reported include both visible and invisible loss. These results are distinguished from total picker and card waste in that practically no fiber is included, whereas textile mill wastes include appreciable amounts of fiber. Tests performed in previous years show the following average relationship of Shirley Analyzer non-lint to grade:

American Upland Grade	Code	Average Non-lint Content (percent)
Strict Middling	(21)	1.9
Middling	(31)	2.3
Strict Low Middling	(41)	3.1
Low Middling	(51)	4.4
Strict Good Ordinary	(61)	5.6
Good Ordinary	(71)	7.2

Data Source: 5,953 American Upland Color and Trash Survey samples tested from crops of 1974-78.

The following scale has been developed to represent the average non-lint content for grades of American Pima cotton:

American Pima Grade	Average Non-lint Content (percent)
2	1.9
3	2.3
4	3.0
5	3.7
6	4.7
7	6.0
8	8.4
9	9.1

Data Source: 2,543 American Pima Color and Trash Survey samples tested from the crops of 1974-78.

Differences between results obtained for individual lots and the average percentages shown for the grades may be due to one or more of the following reasons:

- (1) Grade is a combination of color, leaf and preparation; any one of which may be the limiting factor.
- (2) There is a range of trash allowable within each specific grade.
- (3) These data are based on weight and do not take into consideration the nature of the trash, which may be as important as weight in determining the final grade.

## Yarn Processing Tests

Small scale spinning tests were performed to provide indications of the processing behavior of the various cottons. The percentage of picker and card waste is related to mill turnout. Low percentages of waste indicate high mill turnout. Yarn strength, yarn appearance, yarn neps, and chemical finishing test results as measured in these tests are related to similar quality measurements of the mill product. The spinning potential test provides a measure of spinning end breakage and is directly related to the spinning behavior in the mill. High spinning potential yarn (SPY) numbers indicate low end breakage or good spinning in the mill.

Manufacturing waste reported for a sample of cotton is important because excessive waste increases the cost of cotton products. The percentage of waste extracted by the picking and carding processes in performing a spinning test provides a measure of manufacturing waste. There is an average relationship between this waste and grade as discussed in the previous section on the grade of cotton. The rate at which the cotton is carded, however, affects the picker and card waste values because the more thorough carding action obtained when the carding rate is decreased extracts a larger quantity of waste. The longer staple cottons are generally carded at a lower rate than the shorter cottons in order to obtain acceptable yarn quality. Tests performed in recent years show the following average relationship of picker and card waste to grade:

American Upland Grade	Code	Average Picker and Card Waste (percent)
Strict Middling Middling Strict Low Middling Low Middling Strict Good Ordinary Good Ordinary	(21) (31) (41) (51) (61) (71)	5.2 5.5 6.0 6.9 7.7 8.8
American Pima Grade		Average Picker and Card Waste (percent)
2 3 4 5 6 7 8 9		6.4 6.7 7.4 8.0 8.9 10.1 12.3

Data Source:

5,953 samples of American Upland cotton and 2,543 samples of American Pima Cotton tested for Shirley Analyzer non-lint content from the crops of 1974-78. Picker and card waste was calculated from its relationship to Shirley Analyzer non-lint content.

The percentage of waste removed by the comber is reported in addition to the picker and card waste for cottons processed into combed yarn. The shorter staple cottons are processed through the comber with a closer setting than for the longer staple cottons because smaller comber waste percentages are usually extracted from this cotton in commercial practice.

Yarn strength is perhaps the most important and reliable test of yarn quality. Yarn strength not only determines the range of the usefulness of a given cotton, but is also an indication of spinning and weaving performance. The yarn strength test is performed on 120 yard skeins (80 turns on a 1.5 yard reel). Results reported are based on the average of 25 skeins for each yarn number. Yarn strength is reported in terms of skein strength since studies have shown that such strength values are more closely related to fabric strength as well as to fiber properties than single strand yarn strength. Skein strength data for the two numbers spun are reported for each lot. Length, strength, and fineness influence yarn strength more than other fiber properties.

The following descriptive terms may be of help in determining the relative level of yarn strength in this report:

Kind of yarn, staple length group, and description	Yarn skein in pounds specified ya	for the
Carded Yarns Short Staple Group: Low Average High	8s 262 - 282 283 - 303 304 - 324	82 - 90 91 - 99 100 - 108
Medium Staple Group: Low Average High	22s 88 - 100 101 - 113 114 - 120	26 - 32 33 - 39 40 - 46
Long Staple Group: Low Average High	$ \begin{array}{r} 22s \\ 89 - 105 \\ 106 - 122 \\ 123 - 139 \end{array} $	50s 26 - 34 34 - 43 44 - 52
Combed Yarns Long Staple Group: Low Average High	22s 110 - 126 127 - 143 144 - 160	35 - 43 44 - 52 53 - 61
Extra Long Staple Group: Low Average High	50s 61 - 63 64 - 66 67 - 69	80s 31 - 33 34 - 36 37 - 39

Data Source: 365 short staple; 1,447 medium staple; 144 long staple; and 88 extra long staple lots of cotton tested from the crops of 1974-78.

Yarn elongation results were obtained in connection with yarn skein strength tests. Elongation in the yarn is highly correlated with fiber elongation. Yarns with high elongation give less end breakage in weaving than yarns with low elongation.

The following descriptive terms may be of some help in determining the relative levels of yarn elongation:

Kind of yarn, staple length group, and description	in percent	Yarn elongation in percent for the specified yarn numbers	
Carded Yarns			
Short Staple Group: Low Average High	8s 6.3 - 6.9 7.0 - 7.6 7.7 - 8.3	22s 5.2 - 5.8 5.9 - 6.5 6.6 - 7.2	
Medium Staple Group: Low Average High	$ \begin{array}{r} 22s \\ 5.0 - 5.6 \\ 5.7 - 6.3 \\ 6.4 - 7.0 \end{array} $	3.4 - 4.0 4.1 - 4.7 4.8 - 5.4	
Long Staple Group: Low Average High	$ \begin{array}{r} 22s \\ 4.7 - 5.3 \\ 5.4 - 6.0 \\ 6.1 - 6.7 \end{array} $	50s 3.4 - 4.0 4.1 - 4.7 4.8 - 5.4	
Combed Yarns			
Long Staple Group: Low Average High	22s 5.6 - 6.0 6.1 - 6.5 6.6 - 7.0	50s 4.2 - 4.6 4.7 - 5.1 5.2 - 5.6	
Extra Long Staple Group: Low Average High	50s 5.2 - 5.4 5.5 - 5.7 5.8 - 6.0	80s 4.3 - 4.5 4.6 - 4.8 4.9 - 5.1	

Data Source: 365 short staple; 1,447 medium staple; 144 long staple and 88 extra long staple lots of cotton tested from the crops of 1974-78.

Yarn appearance refers to the relative evenness, smoothness and freedom from foreign material of the yarn as evaluated by a visual comparison of the yarn with the latest standards adopted by the American Society for Testing and Materials (ASTM). Since appearance is very important in many types of cotton products, high yarn appearance grades are desirable. The following descriptive terms may be of help in determining the relative levels of yarn appearance in this report.

Kind of yarn, staple length group, and description	for t	Yarn appearance index for the specified yarn numbers		
Carded Yarns Short Staple Group: Low Average High	8s 109 - 117 118 - 126 127 - 135	22s 91 - 101 102 - 112 113 - 123		
Medium Staple Group: Low Average High	22s 76 - 88 89 - 101 102 - 114	50s 58 - 68 69 - 79 80 - 90		
Long Staple Group: Low Average High	22s 77 - 91 92 - 106 107 - 121	60 = 70 71 - 81 82 - 92		
Combed Yarn Long Staple Group: Low Average High	22s 93 - 105 106 - 118 119 - 131	50s 77 - 87 88 - 98 99 - 109		
Extra Long Staple Group: Low Average High	50s 100 - 106 107 - 113 114 - 120	97 - 105 106 - 114 115 - 123		

Data Source: 365 short staple; 1,447 medium staple; 144 long staple; and 88 extra long staple lots of cotton tested from the crops of 1974-78.

# Yarn Appearance Grades

dex
30
20
10
00
90
80
70
60

Yarn neps are reported for the two yarn numbers spun for each lot of cotton. These results were obtained on a Uster Evenness Tester with Imperfection Indicator, Model B. This is an electronic instrument which detects and counts neps in yarn. The yarn is drawn through a set of condenser plates, approximately 8 mm in length. These plates create an electrical field which counts the neps when the yarn oversteps or understeps present limiting values. Yarn nep tests are made at a constant speed of 50 yards per minute for five minutes, for a total of 250 yards tested per observation. Two observations are considered a complete test. The total of the two observations is multiplied by two to obtain the number of yarn neps per 1,000 yards. Insufficient data has been collected to develop descriptive terms for determining relative levels of yarn neps.

Spinning potential yarn number indicates the finest yarn number that can be spun from a cotton sample without any end breakage when using specific processing procedures. In performing these tests, new travelers, draft gears, and twist gears are installed for the selected yarn number and it is spun for a 15-minute trial period. The yarn number selected is considered acceptable if there is an end breakage involving 5 to 15 of the 96 spindles employed during the trial run. If end breakages occur on less than 5 or more than 15 of the 96 spindles during the trial period, a different varn number is selected to be spun for another 15-minute trial period until the acceptable end breakage rate is obtained. The acceptable trial period is also used for a warm-up period which is followed by a 1hour test period. The spinning potential yarn number is calculated from the deviation of the actual yarn number spun from the desired yarn number and the number of spindles with end breakages during the 1-hour test run. The following descriptive terms may be of help in determining the relative level of spinning potential yarn numbers in this report:

# Spinning Potential Yarn Number (SPY No.)

	Short Staple Group	Medium Staple Group	Long Staple Group
Low	31 - 39	43 - 53	49 - 63
Average	40 - 48	54 - 64	64 - 78
High	49 - 57	65 - 75	79 - 93

Data Source: 365 short staple; 1,447 medium staple; and 144 long staple lots of cotton tested from the crops of 1974-78.

## Chemical Finishing Tests

Information on bleaching and dyeing characteristics of different varieties and growths of raw cotton is useful to textile manufacturers. This information provides a basis for avoiding problems that may result from blending various varieties and growths of cotton with different dyeing properties. Data on chemical finishing properties may thus be used as a basis for selecting cottons of similar finishing properties. Small-scale finishing tests are made on 3-gram samples of finisher drawing sliver. The Ahiba Texomat Dyer is used to make the various finishing tests on the cotton samples. The cotton sample is scoured in a solution containing water, sodium hydroxide, sodium silicate, and wetting agents. After the sample has been scoured, it is then bleached in a solution of water, sodium hydroxide, sodium silicate, hydrogen peroxide, and a sequestering agent. After bleaching, the sample is dyed in a solution of water, direct sky blue dye and sodium chloride.

Color measurements are made on unfinished, bleached and dyed cotton samples. These samples are measured on a Hunterlab Colorimeter, Model 25 M-3. The color values are reported in terms of reflectance (Rd), yellowness (+b) and blueness (-b). The Rd value gives percentages of diffuse reflectance from 0 to 100. The +b value provides a measure of yellowness and the -b value provides a measure of blueness. The brightness or reflectance of the cotton samples increases as the percentage reflectance (Rd) increases. Similarly, the degree of either yellowness (+b) or blueness (-b) increases as the numbers increase.

# Open-End Spinning

This season's summary included yarn quality measurements on short staple cottons spun on an open-end frame. All short staple cotton (Group I) were spun into 8s yarn on a Barber Coleman Spin-Flex open-end frame. The results are reported in Table 5a. Machine settings are shown under Item 8, Table 16 on page 129.

Table 16--Cotton: Standard machine settings and specifications for processing specified staple length groupings

	PROCESS	STAPLE LENGTH GROUPS			
	FNOCE33	Short	Medium	Long	Ext
1. PI	CVED				
	Standard atmospheric conditions:				
	Temperature degrees F.	75	75	75	
	Relative humiditypercent	60	60	60	
	Each test lot is processed through a			••	
	finisher-type picker twice to pro-				
	duce the specified weight of lapounces per yard	14	14	14	
	Type of beater	Kirschner	Kirschner	Kirschner	Kir
	Beater speedr.p.m.	1,000	1,000	1,000	1,
	Settings:				
	Feed roll to beater	3/16	3/16	3/16	3
	Grids to beater, topinches	5/16	5/16	5/16	9
	Grids to beater, bottominches	11/16	11/16	11/16	11
2. CA	RD				
	Standard atmospheric conditions:				
	Temperaturedegrees F.	75	<b>7</b> 5	75	
	Relative humiditypercent	60	60	60	
	Picker lap fedounces per yard	14	14	14	
	Sliver deliveredgrains per yard	50	50	50	
	Production ratepounds per hour	12-1/2	g <b>-</b> 1/2	6-1/2	4
	Doffer speedr.p.m.	11	8	6	
	Cylinder speedr.p.m.	165	165	165	]
	Tat speedinches per minute	2-7/8	2-7/8	2-7/8	2
	Licker-in speedr.p.m.	435	435	435	4
	Clothing:	25	25	25	
	Cylinder, Hollingsworth metallicnumber	35 29	35 29	25 29	
	Doffer, Hollingsworth metallicnumber Flats, Filletnumber	110	110	130	1
	Settings:	110	110	130	,
	Feed plate to licker-ininches	0.010	0.010	0.010	0
	Mote knife to licker-in, topinches	.012	.012	.012	•
	Mote knife to licker-in, bottominches	.010	.010	.010	
	Licker-in screen to cylinderinches	.034	.034	.034	
	Licker-in to cylinderinches	.007	.007	.007	
	Flats to cylinder, back, center, and frontinches	.010	.010	.010	
	Back plate to cylinder, topinches	.022	.022	.022	
	Back plate to cylinder, bottominches	.022	.022	.022	
	Front plate to cylinder, topinches	.029	.029	.029	
	Front plate to cylinder, bottominches	.012	.012	.012	
	Doffer to cylinderinches	.007	.007 .022	.007 .022	
	Cylinder screen, backinches Cylinder screen, centerinches	.034	.034	.034	
	Cylinder screen, frontinches	3/16	3/16	3/16	3
	Doffer comb to dofferinches	.017	.017	.017	•
	Crusher rolls pressurepounds	281	281	281	2
	VER LAPER (combed only)				
	Standard atmospheric conditions:			75	
	Temperature			60	
	Relative humiditypercent			42	
	ap deliveredgrains per yard			808	8
	Speed			46	
	MBER (Model 52)				
	Standard atmospheric conditions:			75	
	Temperature			60	
	aps fed, 6 eachgrains per yard			808	8
	liver deliveredgrains per yard			50	1
	Production per hourpounds			22	7
	Setting of cushion plate to detaching rollinches			.33	
	lominal wastepercent			16 to 17	16

Table 16--Continued

	PROCESS	STAPLE LENGTH GROUPS			
LUNCESS	Short	Medium	Long	Extra Long	
5.	DRAWING FRAME (four over five) Standard atmospheric conditions: Temperaturedegrees F.	75	75	75	75
	Relative humiditypercent First process:	60	75 60	75 60	75 60
	Sliver fed, 8 eachgrains per yard Sliver deliveredgrains per yard Second process:	50 55	50 53	50 53	40 42
	Sliver fed, 8 each	55 60 36	53 55 36	53 55 36	42 44 36
	First to thirdinches Third to fourthinches plus fiber length Fourth to fifthinches plus fiber length	2-3/4 10/16 13/16	2-3/4 10/16 13/16	2-3/4 10/16 13/16	2-3/4 8/16 12/16
6.	LONG DRAFT ROVING (8 x 4, 1 apron type)  Standard atmospheric conditions:  Temperature	75 60 60 1.30 1025	75 60 55 1.80 1025	75 60 55 1.80 1025	75 60 44 4.25 1025
7.	First to second, standardinches Second to thirdinches LONG DRAFT SPINNING (2 apron type)	2-1/4 1-3/8	2-1/4 1-1/2	2-1/4 1-5/8	2-1/4 1-11/16 to 1-7/8
,.	Standard atmospheric conditions: Temperature	75 65 1.30 4.4 8s & 22s  9000	75 65 1.80 4.0 22s & 50s  9000	75 65 1.80 3.8 22s & 50s 22s & 50s 9000	75 65 4.25 3.6  50s & 80s 9000
	First to second, standardinches Second to third, standardinches	2-1/16 1-3/4	2-1/16 1-3/4	2-1/16 1-3/4	2-1/16 1-3/4
8.	OPEN-END SPINNING Standard atmospheric conditions: Temperature	75 65 60 4.5 8s 45,000	     		
	Opening roll speedr.p.m.	7,200		`	

<sup>1/</sup> Additional yarn is spun on a 96 spindle wide gage frame at 9,000 r.p.m. spindle speed to determine the spinning potential yarn number or the finest yarn number that can be spun without end-breakage.

 $<sup>\</sup>frac{2}{}$  All standard yarn numbers are spun on narrow gage frames with spindle speeds of 9,000 r.p.m. except for 8s, which are spun on a wide gage frame with spindle speed of 5,500 r.p.m.